⚠ NOTICE

■ Do not install indoor units in areas (e.g., mobile phone base stations) where the emission of VOCs such as phthalate compounds and formaldehyde is known to be high as this may result in a chemical reaction.

■ When installing or relocating or servicing the air conditioners, use only the specified refrigerant (R410A) to charge the refrigerant lines.
Do not mix it with any other refrigerant and do not allow air to remain in the lines.
If air is mixed with the refrigerant, then it can be the cause of abnormal high pressure in the refrigerant lines, and may result in an explosion and other hazards.
The use of any refrigerant other than that specified for the system will cause mechanical failure, system malfunction or unit breakdown. In the worst case, this could lead to a serious impediment to securing product safety.

eco Changes for a greener tomorrow

Eco Changes is the Mitsubishi Electric Group's environmental statement, and expresses the Group's stance on environmental management. Through a wide range of businesses, we are helping contribute to the realization of a sustainable society.

MITSUBISHI ELECTRIC CORPORATION
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SPLIT-TYPE AIR CONDITIONERS Full Product Line Catalogue 2014

MITSUBISHI ELECTRIC

SPLIT-TYPE AIR CONDITIONERS

Changes for the Better

Mitsubishi Electric Quality

Wrap Yourself in Comfort and Quiet
Eco-conscious Technologies from Japan

Full Product Line Catalogue 2014

for a greener tomorrow eco Changes

MITSUBISHI ELECTRIC CORPORATION

Doing Our Part to Create a Better Future for All...

Core Environmental Policy

The Mitsubishi Electric Group promotes sustainable development and is committed to protecting and restoring the global environment through technology, through all its business activities, and through the actions of its employees.

Environmental Vision 2021

Making Positive Contributions to the Earth and its People through Technology and Action

Preventing Global Warming

- Reduce CO_2 emissions from product usage by 30%
- Reduce total CO_2 emissions from production by 30%
- Aim to reduce CO_2 emissions from power generation

Creating a Recycling-Based Society

- Reduce, reuse and recycle "3Rs" products reduce resources used by 30%
- Zero emissions from manufacturing reducing the direct landfill of waste to zero

Ensuring Harmony with Nature Fostering Environmental Awareness

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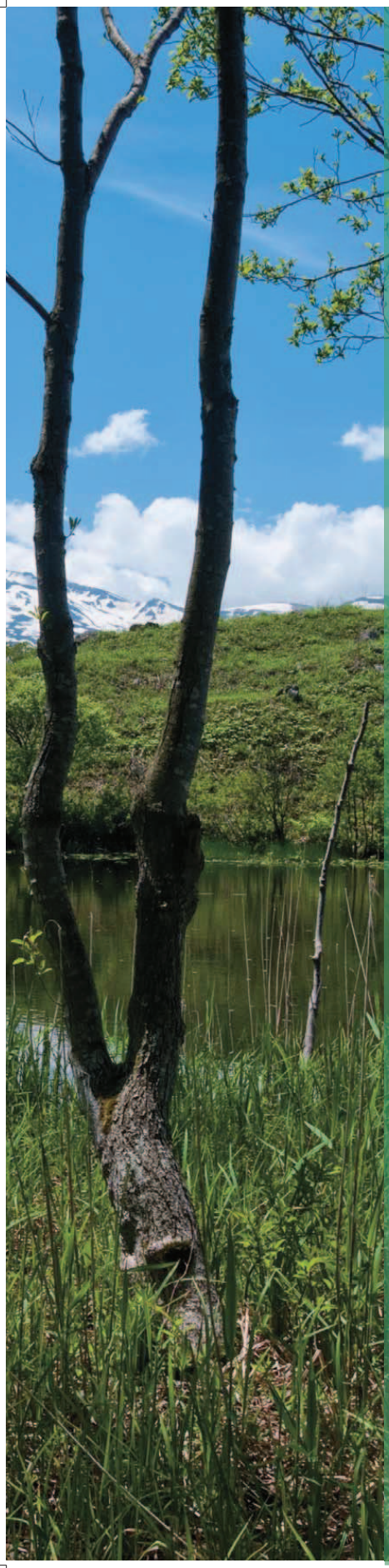
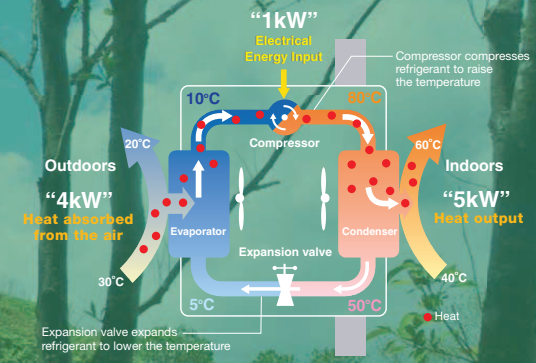


Mitsubishi Electric reflects the essence of this policy and vision in all aspects of its air conditioner business as well.

Preventing Global Warming
Heat pump technology inspires Mitsubishi Electric to design air conditioners that harmonize comfort and ecology.

Heat Pump Principle (When Heating) <Case of COP 5.0>

Refrigerant and Heat Circulation



Output energy is quintuple of input energy

"1kW" Electrical Energy Input	+	"4kW" Heat Absorbed from the air	=	"5kW" Heat Output

Mitsubishi Electric develops technologies to balance comfort and ecology, achieving greater efficiency in heat pump operation.

	Comfort	Ecology
1. Inverter	Faster start-up and more stable indoor temperature than non-inverter units.	Fewer On/Off operations than with non-inverter, saving energy.
2. i-see Sensor	Monitoring the temperature gaps between the floor and the set temperature to prevent deficient warming.	Optimum control of the airflow to prevent excessive compressor operation for more efficient heating operation.
3. Flash Injection	Achieves high heating capacity even at low temperatures, plus faster start-up compared to conventional inverters.	Expands the region covered by heat pump heating system.

Creating a Recycling-Based Society

1. All models are designed for RoHS and WEEE compliance.*
2. Mitsubishi Electric develops downsizing technology to reduce materials use.
   - PUHZ-RP200/250YKA2: Volume reduction approx. 60% compared to PUHZ-RP200/250YHA

* WEEE and RoHS directives: The Waste Electrical and Electronic Equipment (WEEE) Directive is a recycling directive for this type of equipment, while the Restrictions of Hazardous Substances (RoHS) Directive is an EU directive restricting the use of six specified substances in electronic and electrical devices. In the EU, it is no longer possible (from July 2006) to sell products containing any of the six substances.

Ensuring Harmony with Nature / Fostering Environmental Awareness

In striving to heighten the eco-awareness of its employees, Mitsubishi Electric provides education in RoHS, WEEE and other environmental regulations, along with environmental education targeting second and third-year workers.

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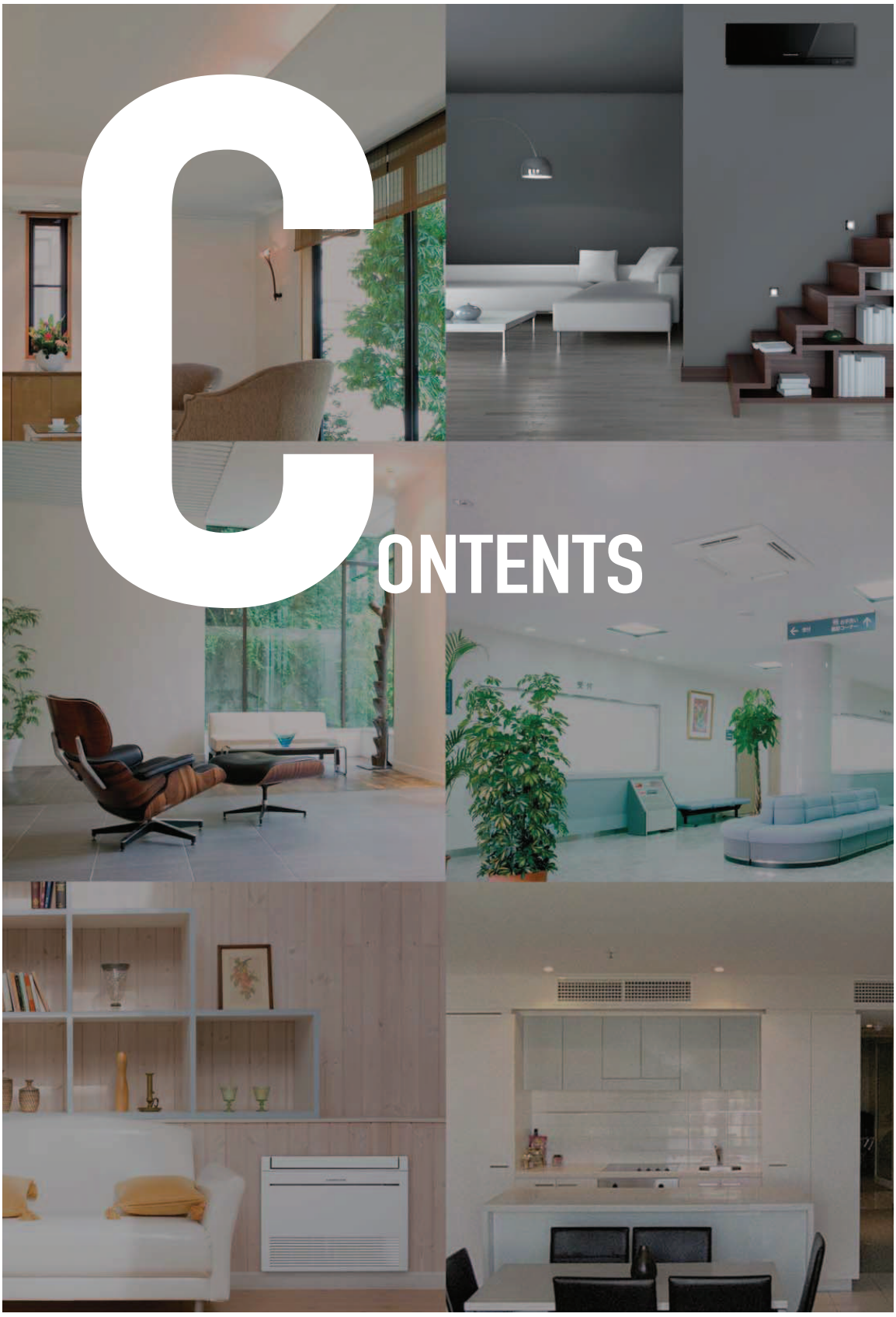

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LINE-UP

M SERIES

INVERTER Models

Model Name		1.5kW	1.8kW	2.0kW	2.2kW	2.5kW	3.5kW	4.2kW	5.0kW	6.0kW	7.1kW	Page
		1-phase	1-phase	1-phase	1-phase	1-phase	1-phase	1-phase	1-phase	1-phase	1-phase	
Wall-mounted	MSZ-F Series					SINGLE H	SINGLE H		SINGLE H			31
	MSZ-E Series		MXZ connection only S-B		MXZ connection only S-B	SINGLE H S-B	SINGLE H S-B	SINGLE S-B	SINGLE S-B			35
	MSZ-S Series	MXZ connection only		MXZ connection only								37
						SINGLE	SINGLE	SINGLE	SINGLE			37
	MSZ-G Series									SINGLE	SINGLE	37
	MSZ-H Series					SINGLE	SINGLE		SINGLE			41
Compact floor	MFZ Series					SINGLE	SINGLE		SINGLE			43
1-way cassette	MLZ Series					MXZ connection only	MXZ connection only		MXZ connection only			45

H : Outdoor unit with freeze-prevention heater is available.
S-B: Indoor units are available in three colours; Silver, Black and White.

S SERIES

INVERTER Models

Model Name		2.5kW	3.5kW	4.2kW	5.0kW	6.0kW	7.1kW	8.0kW	10.0kW	14.0kW	20.0kW	Page
		1-phase	1-phase	1-phase	1-phase	1-phase	1-phase	1-phase	1- & 3-phase	1- & 3-phase	1- & 3-phase	
2 x 2 cassette	SLZ Series	SINGLE L	SINGLE L		SINGLE L							51
Compact ceiling-concealed	SEZ Series	SINGLE L	SINGLE L		SINGLE L	SINGLE L	SINGLE L					53

L : Indoor units are available in two types; with or without the wireless remote controller.

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Indoor Combinations

SINGLE 1 outdoor unit & 1 indoor unit
TWIN 1 outdoor unit & 2 indoor units
TRIPLE 1 outdoor unit & 3 indoor units
QUADRUPLE 1 outdoor unit & 4 indoor units

POWERFUL HEATING SERIES

INVERTER Models

Model Name			2.5kW 1-phase	3.5kW 1-phase	5.0kW 1-phase	7.1kW 1-phase	10.0kW 1- & 3-phase	12.5kW 3-phase	Page
ZUBADAN	4-way cassette	PLA Series				SINGLE TWIN	SINGLE TWIN	SINGLE TWIN	83/87
	Wall-mounted	PKA Series					SINGLE TWIN		83/89
	Ceiling-concealed	PEAD-JA Series				SINGLE TWIN	SINGLE TWIN	SINGLE TWIN	83/90
Wall-mounted		MSZ-FH VEHZ Series	SINGLE H	SINGLE H	SINGLE H				85/91
Compact floor		MFZ-KJ VEHZ Series	SINGLE H	SINGLE H	SINGLE H				92

H: Freeze-prevention heater is included as standard equipment.

MXZ SERIES

INVERTER Models

Model Name	Capacity Class	Wall-mounted	Floor-standing	Cassette	Ceiling-concealed	Ceiling-suspended	Page
up to 8 indoor units MXZ-8B160VA MXZ-8B160YA	15.5kW <1-phase> <3-phase>	MSZ-FH25/35/50 MSZ-EF18/22/25/35/42/50 MSZ-SF15/20/25/35/42/50 MSZ-GF60/71	MFZ-KJ25/35/50	MLZ-KA25/35/50 SLZ-KA25/35/50 PLA-RP35/50/60/71/100	SEZ-KD25/35/50/60/71 PEAD-RP50/60/71/100		95
up to 8 indoor units MXZ-8B140VA MXZ-8B140YA	14.0kW <1-phase> <3-phase>	MSZ-FH25/35/50 MSZ-EF18/22/25/35/42/50 MSZ-SF15/20/25/35/42/50 MSZ-GF60/71	MFZ-KJ25/35/50	MLZ-KA25/35/50 SLZ-KA25/35/50 PLA-RP35/50/60/71/100	SEZ-KD25/35/50/60/71 PEAD-RP50/60/71/100		95
up to 6 indoor units MXZ-6C122VA	12.2kW <1-phase>	MSZ-FH25/35/50 MSZ-EF18/22/25/35/42/50 MSZ-SF15/20/25/35/42/50 MSZ-GF60/71	MFZ-KJ25/35/50	MLZ-KA25/35/50 SLZ-KA25/35/50 PLA-RP50/60/71	SEZ-KD25/35/50/60/71 PEAD-RP50/60/71	PCA-RP50/60/71	95
up to 5 indoor units MXZ-5D102VA	10.2kW <1-phase>	MSZ-FH25/35/50 MSZ-EF18/22/25/35/42/50 MSZ-SF15/20/25/35/42/50 MSZ-GF60/71	MFZ-KJ25/35/50	MLZ-KA25/35/50 SLZ-KA25/35/50 PLA-RP50/60/71	SEZ-KD25/35/50/60/71 PEAD-RP50/60/71	PCA-RP50/60/71	95
up to 4 indoor units MXZ-4D83VA	8.3kW <1-phase>	MSZ-FH25/35/50 MSZ-EF18/22/25/35/42/50 MSZ-SF15/20/25/35/42/50 MSZ-GF60/71	MFZ-KJ25/35/50	MLZ-KA25/35/50 SLZ-KA25/35/50 PLA-RP50/60/71	SEZ-KD25/35/50/60/71 PEAD-RP50/60/71	PCA-RP50/60/71	95
up to 4 indoor units MXZ-4D72VA	7.2kW <1-phase>	MSZ-FH25/35/50 MSZ-EF18/22/25/35/42/50 MSZ-SF15/20/25/35/42/50 MSZ-GF60	MFZ-KJ25/35/50	MLZ-KA25/35/50 SLZ-KA25/35/50 PLA-RP50/60	SEZ-KD25/35/50/60 PEAD-RP60	PCA-RP50/60	95
up to 3 indoor units MXZ-3D68VA	6.8kW <1-phase>	MSZ-FH25/35/50 MSZ-EF18/22/25/35/42/50 MSZ-SF15/20/25/35/42/50 MSZ-GF60	MFZ-KJ25/35/50	MLZ-KA25/35/50 SLZ-KA25/35/50 PLA-RP50/60	SEZ-KD25/35/50/60 PEAD-RP60	PCA-RP50/60	95
up to 3 indoor units MXZ-3D54VA2	5.4kW <1-phase>	MSZ-FH25/35/50 MSZ-EF18/22/25/35/42/50 MSZ-SF15/20/25/35/42/50	MFZ-KJ25/35/50	MLZ-KA25/35/50 SLZ-KA25/35/50 PLA-RP50	SEZ-KD25/35/50 PEAD-RP50	PCA-RP50	95
up to 2 indoor units MXZ-2D53VA (H)	5.3kW <1-phase>	MSZ-FH25/35 MSZ-EF18/22/25/35/42/50 MSZ-SF15/20/25/35/42/50	MFZ-KJ25/35	MLZ-KA25/35 SLZ-KA25/35	SEZ-KD25/35		95
up to 2 indoor units MXZ-2D42VA	4.2kW <1-phase>	MSZ-FH25/35 MSZ-EF18/22/25/35 MSZ-SF15/20/25/35	MFZ-KJ25/35	MLZ-KA25/35 SLZ-KA25/35	SEZ-KD25/35		95
up to 2 indoor units MXZ-2D33VA	3.3kW <1-phase>	MSZ-FH25 MSZ-EF18/22/25 MSZ-SF15/20/25	MFZ-KJ25	MLZ-KA25 SLZ-KA25	SEZ-KD25		95

✻ SEZ-KD25 is not applicable indoor unit to be connected with MXZ-2D/3D/4D/5D, when total capacity of connected indoor units is equivalent with outdoor capacity (capacity ratio is 1).

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LINE-UP

P SERIES

POWER INVERTER Models

Model Name		3.5kW	5.0kW	6.0kW	7.1kW
		1-phase	1-phase	1-phase	1-phase
4-way cassette	PLA Series	SINGLE	SINGLE	SINGLE	SINGLE TWIN
Wall-mounted	PKA Series	SINGLE	SINGLE	SINGLE	SINGLE TWIN
Ceiling-suspended	PCA-KAQ Series	SINGLE	SINGLE	SINGLE	SINGLE TWIN
Ceiling-suspended for Professional Kitchen	PCA-HAQ Series				SINGLE
Floor-standing	PSA Series				SINGLE
Ceiling-concealed	PEAD-JA Series	SINGLE	SINGLE	SINGLE	SINGLE TWIN
	PEA Series				

STANDARD INVERTER Models

Model Name		3.5kW	5.0kW	6.0kW	7.1kW
		1-phase	1-phase	1-phase	1-phase
4-way cassette	PLA Series	SINGLE	SINGLE	SINGLE	SINGLE
Wall-mounted	PKA Series				
Ceiling-suspended	PCA-KAQ Series	SINGLE	SINGLE	SINGLE	SINGLE
Ceiling-suspended for Professional Kitchen	PCA-HAQ Series				
Floor-standing	PSA Series				
Ceiling-concealed	PEAD-JA Series	SINGLE	SINGLE	SINGLE	SINGLE
	PEA Series				

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Indoor Combinations

SINGLE 1 outdoor unit & 1 indoor unit
TWIN 1 outdoor unit & 2 indoor units
TRIPLE 1 outdoor unit & 3 indoor units
QUADRUPLE 1 outdoor unit & 4 indoor units

	10.0kW	12.5kW	14.0kW	20.0kW	25.0kW	40.0kW	50.0kW	Page
	1- & 3-phase	1- & 3-phase	1- & 3-phase	3-phase	3-phase	3-phase	3-phase	
	SINGLE TWIN	SINGLE TWIN	SINGLE TWIN TRIPLE	TWIN TRIPLE QUADRUPLE	TWIN TRIPLE QUADRUPLE			59
	SINGLE TWIN	TWIN	TWIN TRIPLE	TWIN TRIPLE QUADRUPLE	TRIPLE QUADRUPLE			65
	SINGLE TWIN	SINGLE TWIN	SINGLE TWIN TRIPLE	TWIN TRIPLE QUADRUPLE	TWIN TRIPLE QUADRUPLE			68
			TWIN		TRIPLE			69
	SINGLE	SINGLE	SINGLE TWIN	TWIN	TWIN TRIPLE			73
	SINGLE TWIN	SINGLE TWIN	SINGLE TWIN TRIPLE	TWIN TRIPLE QUADRUPLE	TWIN TRIPLE QUADRUPLE			76
				SINGLE	SINGLE	SINGLE*	SINGLE*	79

* 1 indoor unit requires 2 outdoor units.

	10.0kW	12.5kW	14.0kW	20.0kW	25.0kW	40.0kW	50.0kW	Page
	1- & 3-phase	1- & 3-phase	1- & 3-phase	3-phase	3-phase	3-phase	3-phase	
	SINGLE TWIN	SINGLE TWIN	SINGLE TWIN TRIPLE	TWIN TRIPLE QUADRUPLE	TWIN TRIPLE QUADRUPLE			59
	SINGLE TWIN	TWIN	TWIN TRIPLE	TWIN TRIPLE QUADRUPLE	TRIPLE QUADRUPLE			65
	SINGLE TWIN	SINGLE TWIN	SINGLE TWIN TRIPLE	TWIN TRIPLE QUADRUPLE	TWIN TRIPLE QUADRUPLE			68
			TWIN		TRIPLE			69
	SINGLE	SINGLE	SINGLE TWIN	TWIN	TWIN TRIPLE			73
	SINGLE TWIN	SINGLE TWIN	SINGLE TWIN TRIPLE	TWIN TRIPLE QUADRUPLE	TWIN TRIPLE QUADRUPLE			76
				SINGLE	SINGLE	SINGLE*	SINGLE*	79

* 1 indoor unit requires 2 outdoor units.

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NEW ECODESIGN DIRECTIVE

WHAT IS THE ErP DIRECTIVE?

The Ecodesign Directive for Energy-related Products (ErP Directive) establishes a framework to set mandatory standards for ErPs sold in the European Union (EU). The ErP directive introduces new energy-efficiency ratings across various product categories and affects how products such as computers, vacuum cleaners, boilers and even windows are classified in terms of environmental performance.
Regulations that apply to air conditioning systems of rated capacity up to 12kW came into effect as of January 1, 2013. Based the use of future-orientated technologies, Mitsubishi Electric is one step ahead of these changes, with our air conditioning systems already achieving compliance with these new regulations.

NEW ENERGY LABEL AND MEASUREMENTS

Under regulation 2011/626/EU, supplementing directive 2010/30/EU, air conditioning systems are newly classified into energy-efficiency classes on the basis of a new energy labelling system, which includes three new classes: A^{+}, A^{++} and A^{+++}.
Revisions to the measurement points and calculations of the seasonal energy efficiency ratio (SEER) and seasonal coefficient of performance (SCOP) has resulted in changes to how air conditioning systems are classified into energy-efficiency classes.
Specifically, for cooling mode, air conditioning systems must be at least class D by January 1, 2013, and at least class B one year later. For heating mode, air conditioning systems must be at least class A by January 1, 2013 and at least class A^{+} one year later.

■New Energy Efficiency Label

SEER and SCOP
The SEER (Seasonal Energy Efficiency Ratio) value indicates the seasonal energy efficiency value in the cooling mode. The SCOP (Seasonal Coefficient of Performance) value refers to the seasonal efficiency in the heating mode.

Energy efficiency classes from A+++ to D SCOP in heating mode

A+++	> 5,1
A++	> 4,6
A+	> 4,0
A	> 3,4
B	> 3,1
C	> 2,8
D	< 2,5

Energy efficiency classes from A+++ to D SEER in cooling mode

A+++	> 8,5
A++	> 6,1
A+	> 5,6
A	> 5,1
B	> 4,6
C	> 4,1
D	< 3,6

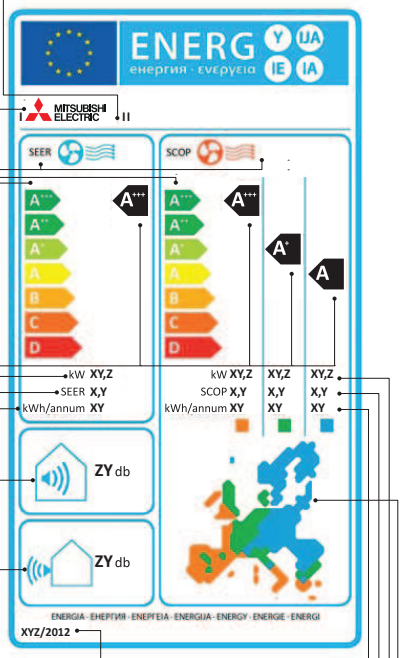
Energy efficiency class
Energy efficiency class of the unit in cooling and heating mode of the unit model

In the heating mode, the indication for the unit model is shown for all three climate zones.

Nominal capacity in cooling mode
SEER value
Annual power consumption for cooling

Operating noise, indoors/outdoors
The sound power level is an important sound energy parameter for assessing a sound source. Contrary to the sound pressure - the sound power is independent of the location of the source and/or the receiver. Maximally admissible values are:

Cooling capacity ≤ 6 kW		Cooling capacity > 6 kW ≤ 12 kW	
Indoor unit	Outdoor unit	Indoor unit	Outdoor unit
60dB(A)	65dB(A)	60dB(A)	70dB(A)



Name or trademark of the manufacturer
Name of the unit/designation of model

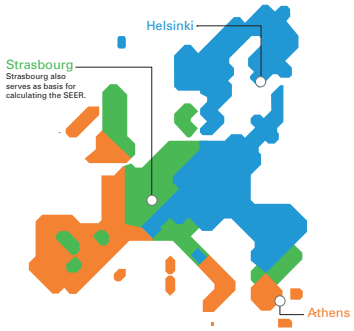
Time reference
Indication on label data

Nominal capacity in heating mode
SCOP value
Annual power consumption for heating

Climate zones
For heating mode, the EU is divided into three climate zones for calculation and classification purposes. This aims at calculating the energy efficiency taking into consideration the actual regional ambient temperatures.

■Climate Zones for Heating Mode

Reference climate zones for calculating the SCOP
Since the climate conditions have a great influence on the operating behaviour in the heat pump mode, three climate zones have been stipulated for the EU: warm, moderate, cold. The measurement points are homogenous at 12°C, 7°C, 2°C and –7°C.



Warm (Athens)

Partial load	Temperature conditions Outdoors DB	Outdoors WB	Indoors DB
–	–	–	20°C
100%	2°C	1°C	20°C
64%	7°C	6°C	20°C
29%	12°C	11°C	20°C

Moderate (Strasbourg)

Partial load	Temperature conditions Outdoors DB	Outdoors WB	Indoors DB
88%	–7°C	–8°C	20°C
54%	2°C	1°C	20°C
35%	7°C	6°C	20°C
15%	12°C	11°C	20°C

Cold (Helsinki)

Partial load	Temperature conditions Outdoors DB	Outdoors WB	Indoors DB
61%	–7°C	–8°C	20°C
37%	2°C	1°C	20°C
24%	7°C	6°C	20°C
11%	12°C	11°C	20°C

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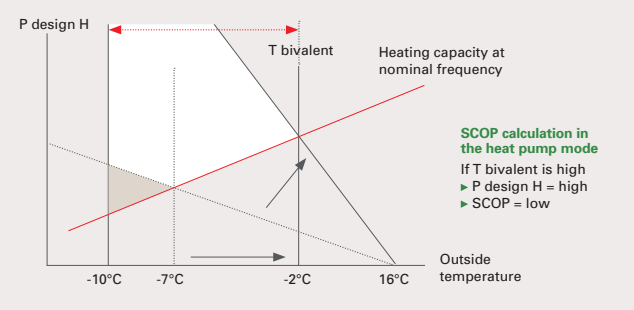
SEER/SCOP

Air conditioning systems were previously assessed using the energy-efficiency rating (EER), which evaluated efficiency in cooling mode, and the coefficient of performance (COP), which defined the efficiency, or the ratio of consumed and output power, in heating mode. Under this system, assessments were not truly reflective of performance as they were based on a single measurement point, which led to manufacturers optimising products accordingly in order to achieve higher efficiency ratings. SEER and SCOP address this problem by including seasonal variation in the ratings via use of realistic measurement points. For cooling mode, measurements at outside temperatures of 20, 25, 30 and 35°C are incorporated and weighted in accordance with climate data for Strasbourg, which is used as a single reference point for the whole EU. For instance, for partial-load operation, which represents more than 90% of operation, there is a correspondingly high weighting for the efficiency classification. For heating mode, a comprehensive temperature profile for the whole EU was not possible, so the EU has been divided into three climate zones, north, central and south, and load profiles created. The same measurement points, at outside temperatures of 12, 7, 2 and –7°C, are used for all three zones.

■SCOP Calculation



Technical Terms with Respect to the SCOP

P design H: Corresponds to a heating load of 100%. The value depends on the selected bivalence point.

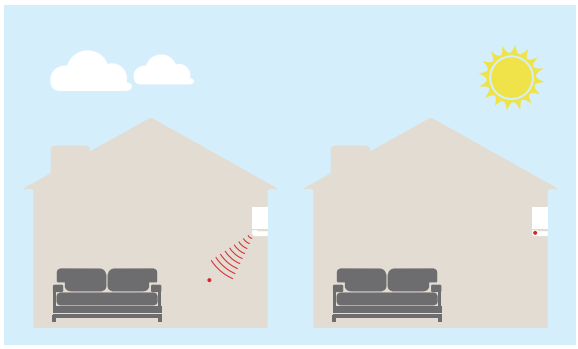
T design: Outside temperature which determines the P design H point. The latter is determined from the area conditions.

T bivalent: Corresponds to the lowest temperature at which full heating performance can be achieved with the heat pump (without additional heating). This point can be freely selected within the prescribed temperature ranges (T design - T bivalent).

SOUND PRESSURE LEVEL

Consumers will also receive more information on the noise levels emitted by split-system air conditioners to help them make their purchasing decision. Specifically, the sound power level of indoor and outdoor units is to be indicated in decibels as an objective parameter. Knowing the sound power makes it possible to calculate sound emissions while considering distance and radiation characteristics, which is beneficial because it allows the noise levels of different air conditioning systems to be compared regardless of the usage location and how the sound pressure is measured. This is an improvement on sound pressure values which are usually measured at an approximate distance of 1m where all modern split-system air conditioning systems tend to be very quiet at an average of 21 decibels.

■Sound Pressure vs Sound Power Level



Sound pressure level dB(A)
The sound pressure level is a sound field parameter which indicates the perceived operating noise of an indoor unit within a certain distance.

Sound power level dB(A)
The sound power is an acoustic parameter which describes the source strength of a sound generator and is thus independent of the distance to the receiver location.

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DC Inverter INVERTER TECHNOLOGIES

Mitsubishi Electric inverters ensure superior performance including the optimum control of operation frequency. As a result, optimum power is applied in all heating/cooling ranges and maximum comfort is achieved while consuming minimal energy. Fast, comfortable operation and amazingly low running cost — That's the Mitsubishi Electric promise.

INVERTERS — HOW THEY WORK

Inverters electronically control the electrical voltage, current and frequency of electrical devices such as the compressor motor in an air conditioner. They receive information from sensors monitoring operating conditions, and adjust the revolution speed of the compressor, which directly regulates air conditioner output. Optimum control of operation frequency results in eliminating the consumption of excessive electricity and providing the most comfortable room environment.

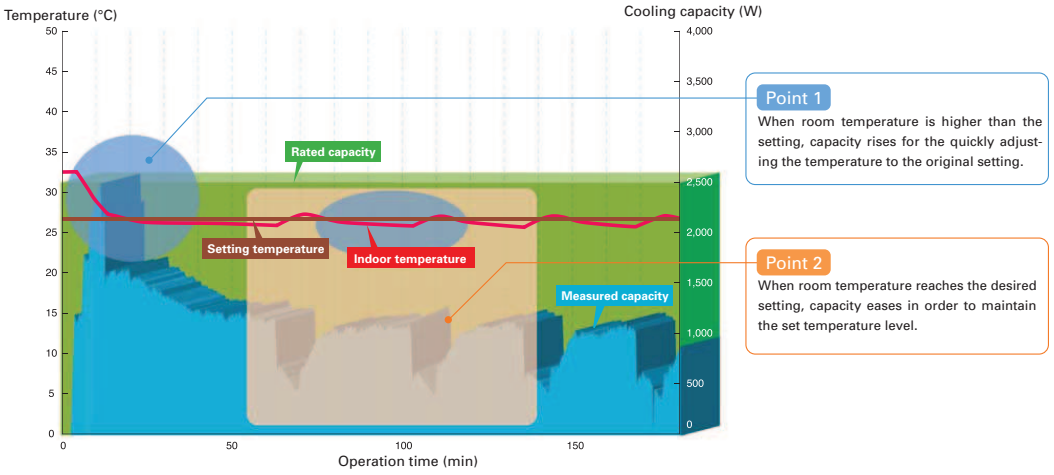
ECONOMIC OPERATION

Impressively low operating cost is a key advantage of inverter air conditioners. We've combined advanced inverter technologies with cutting-edge electronics and mechanical technologies to achieve a synergistic effect that enables improvements in heating/cooling performance efficiency. Better performance and lower energy consumption are the result.

TRUE COMFORT

Simple comparison of air conditioner operation control with and without inverter.

■ Inverter Operation Image (cooling mode)



Point 1 Quick & Powerful

Increasing the compressor motor speed by controlling the operation frequency ensures powerful output at start-up, brings the room temperature to the comfort zone faster than units not equipped with an inverter. Hot rooms are cooled, and cold rooms are heated faster and more efficiently.

Point 2 Room Temperature Maintained

The compressor motor operating frequency and the change of room temperature are monitored to calculate the most efficient waveform to maintain the room temperature in the comfort zone. This eliminates the large temperature swings common with non-inverter systems, and guarantees a pleasant, comfortable environment.

KEY TECHNOLOGIES

Our Rotary Compressor

Our rotary compressors use our original "Poki-Poki Motor" and "Heat Caulking Fixing Method" to realise downsizing and higher efficiency, and are designed to match various usage scenes in residential to commercial applications. Additionally, development of an innovative production method known as "Divisible Middle Plate" realises further size/weight reductions and increased capacity while also answering energy-efficiency needs.

Our Scroll Compressor

Our scroll compressors are equipped with an advanced frame compliance mechanism that allows self-adjustment of the position of the orbiting scroll according to pressure load and the accuracy of the fixed scroll position. This minimises gas leakage in the scroll compression chamber, maintains cooling capacity and reduces power loss.

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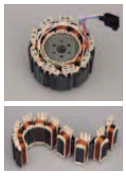
MORE ADVANTAGES WITH MITSUBISHI ELECTRIC

Joint Lap DC Motor



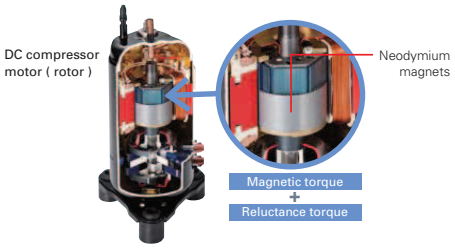
Mitsubishi Electric has developed a unique motor, called the "Poki-Poki Motor" in Japan, which is manufactured using a joint lapping technique. This innovative motor operates based on a high-density, high-magnetic force, leading to extremely high efficiency and reliability.

Magnetic Flux Vector Sine Wave Drive

This drive device is actually a microprocessor that converts the compressor motor's electrical current waveform from a conventional waveform to a sine wave (180°conductance) to achieve higher efficiency by raising the motor winding utilisation ratio and reducing energy loss.

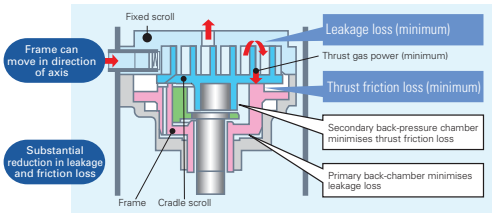
Reluctance DC Rotary Compressor

Powerful neodymium magnets are used in the rotor of the reluctance DC motor. More efficient operation is realised by strong magnetic and reluctance torques produced by the magnets.



Highly Efficient DC Scroll Compressor

Higher efficiency has been achieved by adding a frame compliance mechanism to the DC scroll compressor. The mechanism allows movement in the axial direction of the frame supporting the cradle scroll, thereby greatly reducing leakage and friction loss, and ensuring extremely high efficiency at all speeds.


Fixed scroll
Frame can move in direction of axis
Substantial reduction in leakage and friction loss
Leakage loss (minimum)
Thrust gas power (minimum)
Thrust friction loss (minimum)
Secondary back-pressure chamber minimises thrust friction loss
Primary back-chamber minimises leakage loss
Frame
Cradle scroll

Heat Caulking Fixing Method

To fix internal parts in place, a "Heat Caulking Fixing Method" is used, replacing the former arc spot welding method. Distortion of internal parts is reduced, realising higher efficiency.

DC Fan Motor

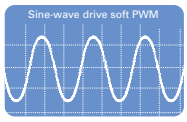
A highly efficient DC motor drives the fan of the outdoor unit. Efficiency is much higher than an equivalent AC motor.

Vector-Wave Eco Inverter

This inverter monitors the varying compressor motor frequency and creates the most efficient waveform for the motor speed. As the result, operating efficiency in all speed ranges is improved, less power is used and annual electricity cost is reduced.

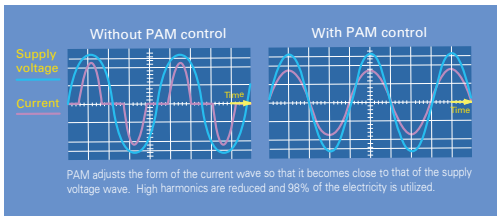
Smooth wave pattern

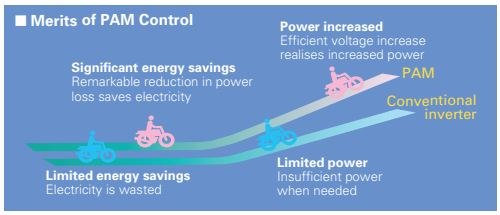
Inverter size has been reduced using insert-molding, where the circuit pattern is molded into the synthetic resin. To ensure quiet operation, soft PWM control is used to prevent the metallic whine associated with conventional inverters.



PAM (Pulse Amplitude Modulation)

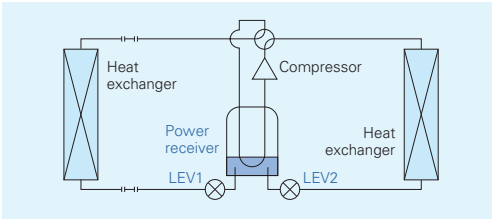
PAM is a technology that controls the current waveform so that it resembles the supply voltage wave, thereby reducing loss and realising more efficient use of electricity. Using PAM control, 98% of the input power supply is used effectively.


Without PAM control
With PAM control
Supply voltage
Current
Time
Time
PAM adjusts the form of the current wave so that it becomes close to that of the supply voltage wave. High harmonics are reduced and 98% of the electricity is utilized.



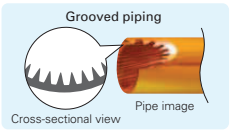
Power Receiver and Twin LEV Control

Mitsubishi Electric has developed a power receiver and twin linear expansion valves (LEVs) circuit that optimise compressor performance. This technology ensures optimum control in response to operating waveform and outdoor temperature. Operating efficiency has been enhanced by tailoring the system to the characteristics of R410A refrigerant.



Grooved Piping

High-performance grooved piping is used in heat exchangers to increase the heat exchange area.



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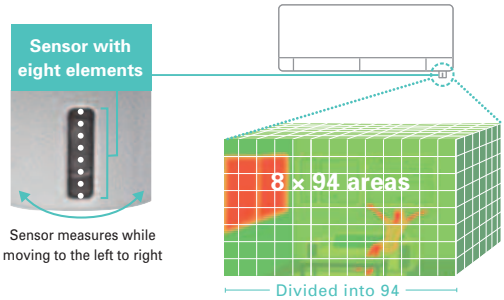
FUNCTIONS (1)

ENERGY-SAVING

3D i-see Sensor

The FH Series is equipped with 3D i-see Sensor, an infrared-ray sensor that measures the temperature at distant positions. While moving to the left and right, eight vertically arranged sensor elements analyze the room temperature in three dimensions. This detailed analysis makes it possible to judge where people are in the room, thus allowing creation of features such as "Indirect airflow," to avoid airflow hitting people directly, and "direct airflow" to deliver airflow to where people are.



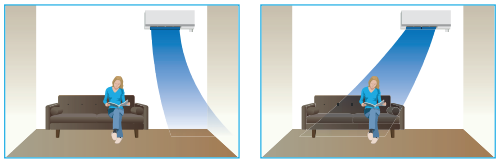
(Image)

Indirect Airflow

The indirect airflow setting can be used when the flow of air feels too strong or direct. For example, it can be used during cooling to avert airflow and prevent body temperature from becoming excessively cooled.

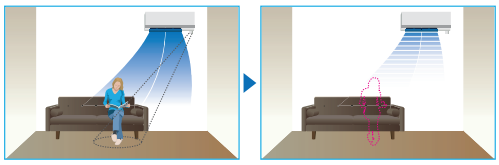
Direct Airflow

This setting can be used to directly target airflow at people such as for immediate comfort when coming indoors on a hot (cold) day.



Absence Detection

The sensors detect whether there are people in the room. When no-one is in the room, the unit automatically switches to energy-saving mode.



The "3D i-see Sensor" detects people's absence and the power consumption is automatically reduced approximately 10% after 10 minutes and 20% after 60 minutes.

Area Temperature Monitor

The "i-see Sensor" monitors the whole room in sections and directs the airflow to areas of the room where the temperature does not match the temperature setting. (When cooling the room, if the middle of the room is detected to be hotter, more airflow is directed towards it.) This eliminates unnecessary heating /cooling and contributes to lower electricity costs.

Cooling mode

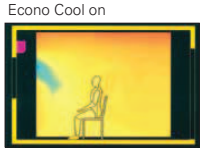
Econo Cool Energy-Saving Feature

"Econo Cool" is an intelligent temperature control feature that adjusts the amount of air directed towards the body based on the air-outlet temperature. The setting temperature can be raised by as much as 2°C without any loss in comfort, thereby realising a 20% gain in energy efficiency. *(Function only available during manual cooling operation.)*

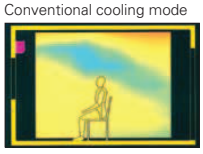
	Conventional	Econo Cool
Ambient temperature	35°C	35°C
Set temperature	25°C	27°C
Perceived temperature	30°C	29.3°C

Econo Cool Mode
A comfortable room environment is maintained even when setting the temperature 2°C higher than the conventional cooling mode.

Econo Cool on



Conventional cooling mode



Temperature distribution (°C)

14 16 18 20 22 24 26 28

Demand Function (Onsite Adjustment)

The demand function can be activated when the unit is equipped with a commercially available timer or an On/Off switch is added to the CNDM connector (option) on the control board of the outdoor unit. Energy consumption can be reduced up to 100% of the normal consumption according to the signal input from outside.

[Example: Power Inverter Series]
Limit energy consumption by changing the settings of SW7-1, SW2 and SW3 on the control board of the outdoor unit. The following settings are possible.

SW7-1	SW2	SW3	Energy consumption
ON	OFF	OFF	100%
	ON	OFF	75%
	ON	ON	50%
	OFF	ON	0% (Stop)

✻PUHZ outdoor only

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ATTRACTIVE

Pure White

Pure white is adopted for the unit colour; white expressing the essence of cleanliness and easily matching virtually all interior décor.

Auto Vane

The vane closes automatically when the air conditioner is not running, concealing the air outlet and creating a flat surface that is aesthetically appealing.

AIR QUALITY

Plasma Quad

Plasma Quad attacks bacteria and viruses from inside the unit using a strong curtain-like electrical field and discharge of electric current across the whole inlet-air opening of the unit.

Air Cleaning Filter

The filter is charged with static electricity, enabling it to attract and capture dust particulates that regular filters don't.

Fresh-air Intake

Indoor air quality is enhanced by the direct intake of fresh exterior air.

Anti-allergy Enzyme Filter

The anti-allergy enzyme filter works to trap allergens such as molds and bacteria and decompose them using enzymes retained in the filter.

High-efficiency Filter

This high-performance filter has a much finer mesh compared to standard filters, and is capable of capturing minute particulates floating in the air that were not previously caught.

Nano Platinum Filter

The filter has a large capture area and incorporates nanometre-sized platinum-ceramic particles that work to kill bacteria and deodourise the circulating air.

Catechin Filter

Catechin is a bioflavonoid by-product of green tea with both antiviral and antioxidant qualities. It also has an excellent deodourising effect, which is why Mitsubishi Electric uses the compound in its air conditioner filters. In addition to improving air quality, it prevents the spreading of bacteria and viruses throughout the room. Easily removed for cleaning and maintenance, when the filter is washed regularly the deodourising action is rated to last more than 10 years.

Oil Mist Filter

The oil mist filter prevents oil mist from penetrating into the inner part of the air conditioner.

Long-life Filter

A special process for the entrapment surface improves the filtering effect, making the maintenance cycle longer than that of units equipped with conventional filters.

Filter Check Signal

Air conditioner operating time is monitored, and the user is notified when filter maintenance is necessary.

Electrostatic Anti-allergy Enzyme Filter

This function features both the Air Cleaning Filter and Anti-allergy Enzyme Filter.

AIR DISTRIBUTION

Double Vane

Double vane separates the airflow in the different directions to deliver airflow not only across a wide area of the room, but also simultaneously to two people in different locations.

Horizontal Vane

The air outlet vane swings up and down so that the airflow is spread evenly throughout the room.

Vertical Vane

The air outlet fin swings from side to side so that the airflow reaches every part of the room.

High Ceiling Mode

In the case of rooms with high ceilings, the outlet-air volume can be increased to ensure that air is circulated all the way to the floor.

Low Ceiling Mode

If the room has a low ceiling, the airflow volume can be reduced for less draft.

Auto Fan Speed Mode

The airflow speed mode adjusts the fan speed of the indoor unit automatically according to the present room conditions.

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FUNCTIONS (2)

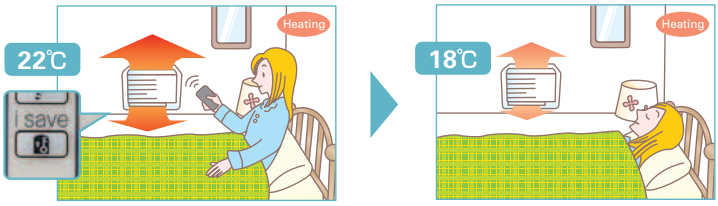
CONVENIENCE

On/Off Operation Timer

Use the remote controller to set the times of turning the air conditioner On/Off.

"i save" Mode

"i save" is a simplified setting function that recalls the preferred (preset) temperature by pressing a single button on the remote controller. Press the same button twice in repetition to immediately return to the previous temperature setting.
Using this function contributes to comfortable waste-free operation, realising the most suitable air conditioning settings and saving on power consumption when, for example, leaving the room or going to bed.



✻ Temperature can be preset to 10°C when heating in the "i-save" mode.

Photo of MFZ Series remote controller

Auto Changeover

The air conditioner automatically switches between heating and cooling modes to maintain the desired temperature.

Auto Restart

Especially useful at the time of power outages, the unit turns back on automatically when power is restored.

Low-temperature Cooling

Intelligent fan speed control in the outdoor unit ensures optimum performance even when the outside temperature is low.

Low-noise Operation (Outdoor Unit)

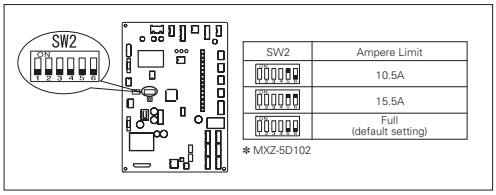
System operation can be adjusted to prioritise less noise from the outdoor unit over air conditioning performance.

Ampere Limit Adjustment

Dip switch settings can be used to adjust the maximum electrical current for operation. This function is highly recommended for managing energy costs.

*Maximum capacity is lowered with the use of this function.

■ Dip Switch Setting (Board for MXZ-5D102)



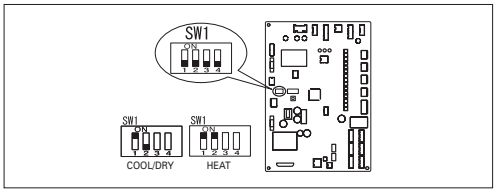
SW2	Ampere Limit
	10.5A
	15.5A
	Full (default setting)

✻ MXZ-5D102

Operation Lock

To accommodate specific use applications, cooling or heating operation can be specified when setting the control board of the outdoor unit. A convenient option when a system needs to be configured for exclusive cooling or heating service.

■ Dip Switch Setting (Board for MXZ-5D102)



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Weekly Timer Built-in Weekly Timer Function

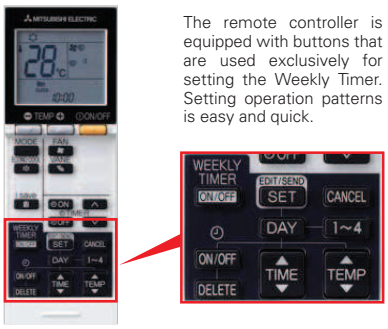
Easily set desired temperatures and operation ON/OFF times to match lifestyle patterns. Reduce wasted energy consumption by using the timer to prevent forgetting to turn off the unit and eliminate temperature setting adjustments.

■ Example Operation Pattern (Winter/Heating mode)

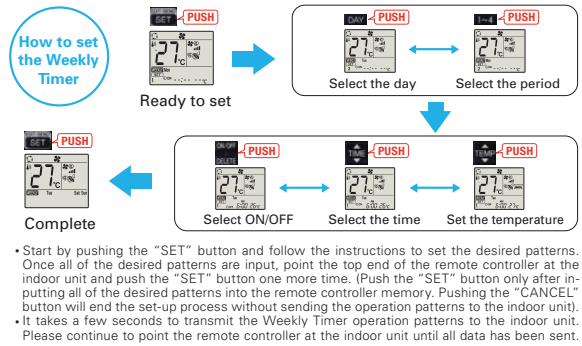
	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.	Sun.
6:00	ON 20°C	ON 20°C	ON 20°C	ON 20°C	ON 20°C	ON 20°C	ON 20°C
8:00	Automatically changes to high-power operation at wake-up time						
10:00	OFF	OFF	OFF	OFF	OFF	ON 18°C	ON 18°C
12:00	Automatically turned off during work hours					Midday is warmer, so the temperature is set lower	
14:00							
16:00							
18:00	ON 22°C	ON 22°C	ON 22°C	ON 22°C	ON 22°C	ON 22°C	ON 22°C
20:00	Automatically turns on, synchronized with arrival at home					Automatically raises temperature setting to match time when outside-air temperature is low	
22:00 (during sleeping hours)	ON 18°C	ON 18°C	ON 18°C	ON 18°C	ON 18°C	ON 18°C	ON 18°C
	Automatically lowers temperature at bedtime for energy-saving operation at night						

Settings **Pattern Settings:** Input up to four settings for each day
Settings: •Start/Stop operation •Temperature setting ✻The operation mode cannot be set.

■ Easy set-up using dedicated buttons



The remote controller is equipped with buttons that are used exclusively for setting the Weekly Timer. Setting operation patterns is easy and quick.



- Start by pushing the "SET" button and follow the instructions to set the desired patterns. Once all of the desired patterns are input, point the top end of the remote controller at the indoor unit and push the "SET" button one more time. (Push the "SET" button only after inputting all of the desired patterns into the remote controller memory. Pushing the "CANCEL" button will end the set-up process without sending the operation patterns to the indoor unit).
- It takes a few seconds to transmit the Weekly Timer operation patterns to the indoor unit. Please continue to point the remote controller at the indoor unit until all data has been sent.

SYSTEM CONTROL

PAR-31MAA/PAC-YT52CRA

Units are compatible for use with the PAR-31MAA or PAC-YT52CRA remote controller, which has a variety of management functions.

COMPO COMPO (Simultaneous Multi-unit Operation)

Multiple indoor units can be connected to a single outdoor unit. (Depending on the unit combination, connection of up to four units is possible; however, all indoor units must operate at the same settings.)

Group Control System Group Control

The same remote controller is capable of controlling the operational status of up to 16 refrigerant systems.

MXZ connection MXZ Connection

Connection to the MXZ multi-split outdoor unit is possible.

M-NET connection M-NET Connection

Units can be connected to MELANS system controllers (M-NET controllers) such as the AG-150A.

Wi-Fi Interface Wi-Fi Interface

Interface enabling users to control air conditioners and check operating status via devices such as personal computers, tablets and smartphones.

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FUNCTIONS (3)

INSTALLATION

Cleaning-free Pipe Reuse

It is possible to reuse the same piping. It allows cleaning-free renewal of air conditioning systems that use R22 or R410 refrigerant.

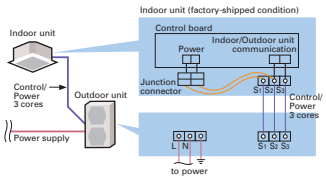
Reuse of Existing Wiring

Wiring recycling problem solved! Compatible with other wiring connection methods*

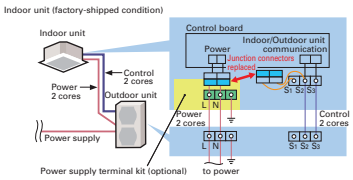
The wiring method has been improved, making it possible to use methods different from that utilized for control and power supply. Units are compatible with the dual harness control line/power line method and the separate power supply method. Using a power supply terminal kit, wire can be efficiently reused at the time of system renewal regardless of the method the existing system uses.

* Optional. Usage may be limited due to wiring type diameter.

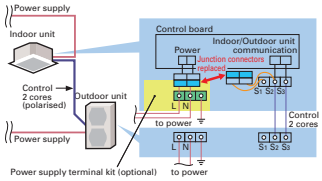
Single Harness Control/Power Line Method (Current method)



Dual Harness Control Line/Power Line Method



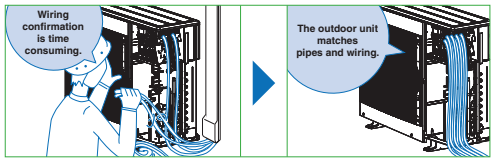
Separate Power Supply Method



Wiring/Piping Correction Function*

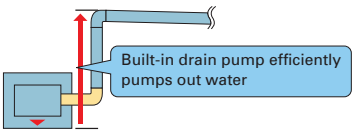
The push of a single button is all that is required to confirm that piping and wiring are properly connected. Corrections are made automatically if a wiring error is detected, eliminating the need for complicated wiring confirmation work when expanding the number of rooms served.

* This function cannot be used when the outdoor temperature is below 0°C. The correction process requires 10–20 minutes, and only works when the unit is set to the Cooling mode.



Drain Pump

A built-in drain pump enables drain piping to be raised.



Flare Connection

Flare connection to cooling pipe work is possible.

Pump Down Switch

Enables smooth and easy recovery of refrigerant. Simply press the "Pump Down" switch before moving or changing the unit.

Outdoor unit control circuit board

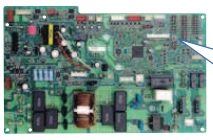
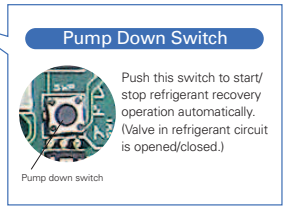


*Photo of Model PUHZ-P100


Pump Down Switch
Push this switch to start/ stop refrigerant recovery operation automatically. (Valve in refrigerant circuit is opened/closed.)
Pump down switch

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MAINTENANCE

Quick Clean Body

Exclusive Quick Clean Kit (Optional)

Our exclusive "Quick Clean Kit" can be easily connected to a household vacuum cleaner for quick and easy cleaning of the heat exchanger.*

*Wearing gloves is highly recommended when cleaning the heat exchanger, because touching it with bare hands can cause injury.

Self-Diagnostic Function (Check Code Display)

Check codes are displayed on the remote controller or the operation indicator to inform the user of malfunctions detected.

Failure Recall Function

Operation failures are recorded, allowing confirmation when needed.

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FUNCTION LIST (1)

Category		Icon	Combination	M SERIES																									
			Indoor unit	MSZ-FH25/35/50VE							MSZ-EF18/22/25/35/42/50VE(W)(B)(S)							MSZ-SF15/20VA						MSZ-SF25/35/42/50VE						
			Outdoor unit	MUZ -FH	MXZ -2D	MXZ -3D	MXZ -4D	MXZ -5D	MXZ -6C	MXZ -8B	MUZ -EF	MXZ -2D	MXZ -3D	MXZ -4D	MXZ -5D	MXZ -6C	MXZ -8B	MXZ -2D	MXZ -3D	MXZ -4D	MXZ -5D	MXZ -6C	MXZ -8B	MUZ -SF	MXZ -2D	MXZ -3D	MXZ -4D	MXZ -5D	MXZ -6C	MXZ -8B
Technology	DC Inverter			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Joint Lap DC Motor			●	●	●	72				●	●	●	72				●	●	72				●	●	●	72			
	Magnetic Flux Vector Sine Wave Drive									●							●						●							●
	Reluctance DC Rotary Compressor						83	●	●					83	●	●				83	●	●					83	●	●	
	Highly Efficient DC Scroll Compressor									●							●						●							●
	Heating Caulking (Compressor)			●	●	●	72				●	●	●	72				●	●	72					●	●	72			
	DC Fan Motor			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Vector-Wave Eco Inverter									●							●						●							●
	PAM (Pulse Amplitude Modulation)			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Power Receiver and Twin LEV Control					●	●	●					●	●	●				●	●	●					●	●	●			
	Grooved Piping			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Functions	Energy Saving	Felt Temperature Control (3D i-see Sensor)		●	●	●	●	●	●	●																				
		AREA Temperature Monitor		●	●	●	●	●	●	●																				
		Econo Cool Energy-saving Feature		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
		Standby Power Consumption Cut		●							●													●							
		Demand Function								Opt							Opt						Opt							Opt
	Attractive	Pure White		●	●	●	●	●	●	●	VEW	VEW	VEW	VEW	VEW	VEW	VEW	●	●	●	●	●	●	●	●	●	●	●	●	●
		Auto Vane		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Air Quality	Plasma Quad		●	●	●	●	●	●	●																				
		Fresh-air Intake																												
		Anti-allergy Enzyme Filter																												
		Electrostatic Anti-allergy Enzyme Filter		●	●	●	●	●	●	●	Opt	Opt	Opt	Opt	Opt	Opt	Opt							Opt	Opt	Opt	Opt	Opt	Opt	Opt
		High-efficiency Filter																												
		Catechin Filter																												
		Nano Platinum Filter									●	●	●	●	●	●	●							●	●	●	●	●	●	●
		Oil Mist Filter																												
		Long-life Filter																												
		Filter Check Signal																												
	Air Distribution	Double Vane		●	●	●	●	●	●	●																				
		Horizontal Vane		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
		Vertical Vane		●	●	●	●	●	●	●																				
		High Ceiling Mode																												
		Low Ceiling Mode																												
		Auto Fan Speed Mode		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Convenience	On/off Operation Timer		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
		"i save" Mode		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
		Auto Changeover		●	●*1	●*1	●*1	●*1	●*1	●*1	●	●*1	●*1	●*1	●*1	●*1	●*1	●*1	●*1	●*1	●*1	●*1	●*1	●	●*1	●*1	●*1	●*1	●*1	●*1
		Auto Restart		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
		Low-temperature Cooling		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
		Low-noise Operation (Outdoor Unit)			●	●	●	●	●	●		●	●	●	●	●	●	●	●	●	●	●	●		●	●	●	●	●	●
		Ampere Limit Adjustment					83	●	●	●				83	●	●	●			83	●	●	●				83	●	●	●
		Operation Lock			●	●	●	●	●	●		●	●	●	●	●	●	●	●	●	●	●	●		●	●	●	●	●	●
		Built-in Weekly Timer Function		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
		Rotation, Back-up and 2nd Stage Cut-in Functions																												
	System Control	PAR-31MAA Control *3		Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
		PAC-YT52CRA Control *3		Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
		Centraliesd On/Off Control *3		Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
		System Group Control *3		Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
		M-NET Connection *3		Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
		COMPO *4																												
		MXZ Connection			●*2	●*2	●*2	●*2	●*2	●*2		●*2	●*2	●*2	●*2	●*2	●*2	●*2	●*2	●*2	●*2	●*2	●*2		●*2	●*2	●*2	●*2	●*2	●*2
	Installation	Cleaning-free Pipe Reuse		●	●	●	●	●	●		●	●	●	●	●	●		●	●	●	●	●		●	●	●	●	●	●	
		Reuse of Existing Wiring																												
		Wiring/Piping Correction Function			●	●	●	●	●			●	●	●	●	●			●	●	●	●			●	●	●	●	●	
		Drain Pump																												
		Pump Down Switch																												
		Flare Connection		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Maintenance	Self-Diagnosis Function (Check Code Display)		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
		Failure Recall Function		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

*1 When multiple indoor units connected to an MXZ outdoor unit are running at the same time, simultaneous cooling and heating is not possible.
*2 For the possible connectivity of MXZ outdoor units and indoor units, please refer to the list on page 99 for details.
*3 Please refer to "System Control" on pages 25-26 for details.
*4 Please refer to page 54 for details.

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	M SERIES																				S SERIES															
	MSZ-GF60/71VE						MSZ-HJ25/35/50VA	MFZ-KJ25/35/50VE							MLZ-KA25/35/50VA							SLZ-KA25/35/50VAL/VAQ							SEZ-KD25/35/50/60/71VAL/VAQ						
	MUZ-GF	MXZ-3D	MXZ-4D	MXZ-5D	MXZ-6C	MXZ-8B	MUZ-HJ	MUFZ-KJ	MXZ-2D	MXZ-3D	MXZ-4D	MXZ-5D	MXZ-6C	MXZ-8B	MXZ-2D	MXZ-3D	MXZ-4D	MXZ-5D	MXZ-6C	MXZ-8B	SUZ-KA	MXZ-2D	MXZ-3D	MXZ-4D	MXZ-5D	MXZ-6C	MXZ-8B	SUZ-KA	MXZ-2D	MXZ-3D	MXZ-4D	MXZ-5D	MXZ-6C	MXZ-8B
	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	●	●	72				●	●	●	●	72				●	●	72				●	●	●	72				●	●	●	72				●	●	
						●								●						●						●										●
			83	●	●						83	●	●				83	●	●					83	●	●					83	●	●			
						●								●						●						●										●
		●	72				35	●	●	●	72				●	●	72				●	●	●	72				●	●	●	72					
	●	●	●	●	●	●	50	●	●	●	●	●	●	●	●	●	●	●	●	●								●	●	●	●	●	●	●	●
						●								●						●						●										●
	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
		●	●	●						●	●	●				●	●	●					●	●	●					●	●	●			
	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	●	●	●	●	●	●	●		●	●	●	●	●	●	●	●	●	●	●	●															
	●							●																												
						Opt								Opt						Opt						Opt										Opt
	●	●	●	●	●	●	●	●	●	●	●	●	●	●							●	●	●	●	●	●	●								
	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●								
																					●	●	●	●	●	●	●									
									●	●	●	●	●	●	Opt	Opt	Opt	Opt	Opt	Opt																
	Opt	Opt	Opt	Opt	Opt	Opt																													
							Opt								Opt	Opt	Opt	Opt	Opt	Opt																
	●	●	●	●	●	●																													
																					●	●	●	●	●	●	●									
																					VAQ	VAQ	VAQ	VAQ	VAQ	VAQ	VAQ									
	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●									
															●	●	●	●	●	●																
															●	●	●	●	●	●																
							●	●	●	●	●	●	●	●	●	●	●	●	●	●							●	●	●	●	●	●	●			
	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●							●	●	●	●	●	●	●			
	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●							●	●	●	●	●	●	●			
		●	●	●	●	●			●	●	●	●	●	●	●	●	●	●	●	●								●	●	●	●	●	●			
			83	●	●	●					83	●	●	●			83	●	●	●				83	●	●	●				83	●	●	●		
		●	●	●	●	●			●	●	●	●	●	●	●	●	●	●	●	●		●	●	●	●	●	●		●	●	●	●	●	●		
	●	●	●	●	●	●		●																												
	Opt	Opt	Opt	Opt	Opt	Opt		Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
	Opt	Opt	Opt	Opt	Opt	Opt		Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
	Opt	Opt	Opt	Opt	Opt	Opt		Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
	Opt	Opt	Opt	Opt	Opt	Opt		Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
	Opt	Opt	Opt	Opt	Opt	Opt		Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
		●*2	●*2	●*2	●*2	●*2			●*2	●*2	●*2	●*2	●*2	●*2	●*2	●*2	●*2	●*2	●*2	●*2		●*2	●*2	●*2	●*2	●*2	●*2		●*2	●*2	●*2	●*2	●*2	●*2	●*2	●*2
	●	●	●	●	●		●	●	●	●	●	●	●		●	●	●	●	●			●	●	●	●	●				●	●	●	●	●		
		●	●	●	●				●	●	●	●	●		●	●	●	●	●			●	●	●	●	●				●	●	●	●	●		
															●	●	●	●	●	●	●	●	●	●	●	●	●	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

• The figures listed in the table are *only when combined with an outdoor unit with the appropriate capacity range*.
• Opt: Separate parts must be purchased.

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FUNCTION LIST (2)

Category		Icon	Combination	P SERIES																
			Indoor unit	PLA-(Z)RP35/50/60/71/100/125/140BA									PEAD-RP35/50/60/71/100/125/140JA(L)Q								
			Outdoor unit	PUHZ -SHW	PUHZ -(Z)RP	PUHZ -P	SUZ -KA	MXZ -3D	MXZ -4D	MXZ -5D	MXZ -6C	MXZ -8B	PUHZ -SHW	PUHZ -(Z)RP	PUHZ -P	SUZ -KA	MXZ -3D	MXZ -4D	MXZ -5D	MXZ -6C	MXZ -8B
Technology	DC Inverter			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Joint Lap DC Motor				35-71		●	●	●					35-71		●	●	●			
	Magnetic Flux Vector Sine Wave Drive			●	●	●						●	●	●	●			●	●		●
	Reluctance DC Rotary Compressor					100-140			83	●	●				100-140			83	●	●	
	Highly Efficient DC Scroll Compressor			●	100-250	200/250						●	●	100-250	200/250						●
	Heating Caulking (Compressor)				35-71		●	●	72					35-71		●	●	72			
	DC Fan Motor			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Vector-Wave Eco Inverter			●	●	●						●	●	●	●						●
	PAM(Pulse Amplitude Modulation)			●	35-140	100-140	●	●	●	●	●	●	●	35-140	100-140	●	●	●	●	●	●
	Power Receiver and Twin LEV Control			●	●			●	●	●	●		●	●			●	●	●	●	
	Grooved Piping			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Functions	Energy Saving	Felt Temperature Control (i-see Sensor)																			
		AREA Temperature Monitor		Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt									
		Econo Cool Energy-saving Feature																			
		'I-Feel' Control																			
		Demand Function		Opt	Opt	Opt						Opt	Opt	Opt	Opt						Opt
	Attractive	Pure White		●	●	●	●	●	●	●	●	●									
		Auto Vane		●	●	●	●	●	●	●	●	●									
	Air Quality	Plasma Quad																			
		Fresh-air Intake		●	●	●	●	●	●	●	●	●									
		Anti-allergy Enzyme Filter																			
		High-efficiency Filter		Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt									
		Catechin Filter																			
		Oil Mist Filter																			
		Long-life Filter		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
		Filter Check Signal		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Air Distribution	Horizontal Vane		●	●	●	●	●	●	●	●	●									
		Vertical Vane																			
		High Ceiling Mode		●	●	●	●	●	●	●	●	●									
		Low Ceiling Mode		●	●	●	●	●	●	●	●	●									
		Auto Fan Speed Mode		●	●	●	●	●	●\	●	●	●	●	●	●	●	●	●	●	●	●
	Convenience	On/off Operation Timer		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
		"i save" Mode																			
		Auto Changeover		●	●	●	●	●*1	●*1	●*1	●*1	●*1	●	●	●	●	●	●	●	●	●
		Auto Restart		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
		Low-temperature Cooling		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
		Low-noise Operation (Outdoor Unit)		●	●	●		●	●	●	●	●	●	●	●		●	●	●	●	●
		Ampere Limit Adjustment		112/140	60-140V 200/250				83	●	●	●	112/140	60-140V 200/250				83	●	●	●
		Operation Lock						●	●	●	●	●									
		Built-in Weekly Timer Function																			
		Rotation, Back-up and 2nd Stage Cut-in Functions		Opt	Opt	Opt							Opt	Opt	Opt						
	System Control	PAR-31MAA Control *3		Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
		PAC-YT52CRA Control *3		Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
		Centraliesd On/Off Control *3		Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
		System Group Control *3		●	●	●	Opt	Opt	Opt	Opt	Opt	Opt	●	●	●	Opt	Opt	Opt	Opt	Opt	Opt
		M-NET Connection *3		Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
		COMPO *4		●	71-250	●							●	71-250	●						
		MXZ Connection						●*2	●*2	●*2	●*2	●*2					●*2	●*2	●*2	●*2	●*2
	Installation	Cleaning-free Pipe Reuse		●	●	●	●	●	●	●	●		●	●	●	●	●	●	●	●	
		Reuse of Existing Wiring		Opt	Opt	Opt							Opt	Opt	Opt						
		Wiring/Piping Correction Function						●	●	●	●						●	●	●	●	
		Drain Pump		●	●	●	●	●	●	●	●	●	●*5	●*5	●*5	●*5	●*5	●*5	●*5	●*5	●*5
		Pump Down Switch		●	●	●							●	●	●						
		Flare Connection		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Maintenance	Quick Clean Body																			
		Self-Diagnosis Function (Check Code Display)		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
		Failure Recall Function		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

*1 When multiple indoor units connected to an MXZ outdoor unit are running at the same time, simultaneous cooling and heating is not possible.
*2 For the possible connectivity of MXZ outdoor units and indoor units, please refer to the list on page 95 for details.
*3 Please refer to "System Control" on pages 27-28 for details.
*4 Please refer to page 16 for details.
*5 PEAD-RP JALQ are not equipped with a drain pump.

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	P SERIES																	
	PEA-RP200/250/400/500GAQ		PKA-RP35/50HAL		PKA-RP60/71/100KAL			PCA-RP35/50/60/71/100/125/140KAQ							PCA-RP71HAQ		PSA-RP71/100/125/140KA	
	PUHZ-RP	PUHZ-P	PUHZ-(Z)RP	PUHZ-P	PUHZ-SHW	PUHZ-(Z)RP	PUHZ-P	PUHZ-(Z)RP	PUHZ-P	SUZ-KA	MXZ-3D	MXZ-4D	MXZ-5D	MXZ-6C	PUHZ-(Z)RP	PUHZ-P	PUHZ-(Z)RP	PUHZ-P
	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
			35-71			60-71		50-71		●	●	●	●	●	71		71	
	●	●	●	●	●	●	●	●	●						●	●	●	●
				100-140			100-140		100-140			83	●	●		100/125		100-140
	●	●	100-200	200	●	100-250	200/250	100-250	200/250						100-250	250	100-250	200/250
			35-71			35-71		35-71		●	●	72			35-71		35-71	
	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	●	●	●	●	●	●	●	●	●						●	●	●	●
			35-140	100-140	●	60-140	100-140	50-140	100-140	●	●	●	●	●	71-140	125/140	71-140	100-140
	●		●		●	●		●			●	●	●	●	●		●	
	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt						Opt	Opt	Opt	Opt
			●	●	●	●	●	●	●	●	●	●	●	●			●	●
			●	●	●	●	●	●	●	●	●	●	●	●				
								●	●	●	●	●	●	●	●	●		
								Opt	Opt	Opt	Opt	Opt	Opt	Opt				
															●	●		
								●	●	●	●	●	●	●			●	●
			Opt	Opt	Opt	Opt	Opt	●	●	●	●	●	●	●	●	●	●	●
			●	●	●	●	●	●	●	●	●	●	●	●				
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								●	●	●	●	●	●	●				
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			●	●	●	●	●	●	●	●	●	●	●	●				
	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	●	●	●	●	●	●	●	●	●	●	●*1	●*1	●*1	●*1	●	●	●	●
	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	●	●	●	●	●	●	●	●	●		●	●	●	●	●	●	●	●
	●		60-140V 200/250		112/140	60-140V 200/250		60-140V 200/250				83	●	●	71-140V 200/250		71-140V 200/250	
											●	●	●	●				
			Opt	Opt	Opt	Opt	Opt	●	●		●	●	●	●	●	●		
	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
			Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
	●	●	Opt	Opt	Opt	Opt	Opt	●	●	Opt	●	●	●	●	●	●	Opt	Opt
	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt
			71-250	●	●	71-250	●	71-250	●						71-250	●	71-250	●
											●*2	●*2	●*2	●*2				
	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
			Opt	Opt	Opt	Opt	Opt	Opt	Opt						Opt	Opt	Opt	Opt
											●	●	●	●				
			Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt				
	●	●	●	●	●	●	●	●	●						●	●	●	●
	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

• If a numerical figure is listed, the feature is only available with the outdoor unit of that capacity.
• Opt: Optional parts must be purchased.

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CONTROL TECHNOLOGIES

PAR-31MAA

User-friendly Deluxe Remote Controller with Excellent Operability and Visibility

Easy To Read & Easy To Use
Full Dot Liquid-crystal Display Adopted

Easier to read thanks to use of a full dot liquid-crystal display with backlight, and easier to use owing to adopting a menu format that has reduced the number of operating buttons.

Display Example [Operation Mode]

Full Dot LCD

Multi-language Display

Multi-language

Control panel operation in eight different languages

Choose the desired language, among the following languages.

Energy-efficient Control
Operation Control Functions

Energy-Saving Schedule

Precise control of power consumption

The amount of power consumed in each time period is managed so that the demand value is not exceeded. The demand control function can be set to start and finish in 5-minute units. Additionally, the level can be adjusted to 0, 50, 60, 70, 80 or 90% of maximum capacity, and up to 4 patterns can be set per day. Air-conditioning operation is automatically controlled to ensure that electricity in excess of the contracted volume is not consumed.

■Setting pattern example

Start time		Finish time	Capacity savings
8:15	→	12:00	80%
12:00	→	13:00	50%
13:00	→	17:00	90%
17:00	→	21:00	50%

Auto-return

Prevents wasteful operation by automatically returning to the preset temperature after specified operating time

After adjusting the temperature for initial heating in winter or cooling on a hot summer day, it is easy to forget to return the temperature setting to its original value. The Auto-return function automatically resets the temperature back to the original setting after a specified period of time, thereby preventing overheating/overcooling. The Auto-return activation time can be set in 10-minute units, in a range between 30 and 120 minutes.

*Auto-return cannot be used when Temperature Range Restrictions is in use.

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Night Setback

Keep desired room temperatures automatically

This function monitors the room temperature and automatically activates the heating mode when the temperature drops below the preset minimal temperature setting. It has the same function for cooling, automatically activating the cooling mode when the temperature rises above the preset maximum temperature setting.

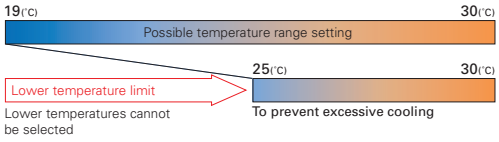
Temperature Range Restriction

Temperature Range Restriction prevents overheating/overcooling

Using a temperature that is 1°C lower/higher for heating/cooling results in a 10% reduction in power consumption.* Temperature Range Restriction limits the maximum and minimum temperature settings, contributing to the prevention of overheating/overcooling.

*In-house calculations

Cooling/Dry (Setting example of minimum temp. in 25°C)



Recommended for: Office, Restaurant

Auto-off Timer

Turns heating/cooling off automatically after preset time elapses

When using Auto-off Timer, even if one forgets to turn off the unit, operation stops automatically after the preset time elapses, thereby preventing wasteful operation. Auto-off Timer can be set in 10-minute units, in a range between 30 minutes and 4 hours. Eliminates all anxiety about forgetting to turn off the unit.

Recommended for: Meeting room, Changing room

Operation Lock

Fixed temperature setting promotes energy savings

In addition to operation start/stop, the operation mode, temperature setting and airflow direction can be locked. Unwanted adjustment of temperature settings is prevented and an appropriate temperature is constantly maintained, leading to energy savings. This feature is also useful in preventing erroneous operation or tampering.

Recommended for: Office, School, Public hall, Hospital, Computer server facility

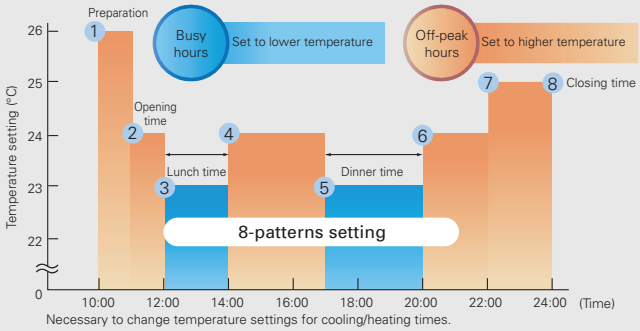
Weekly Timer

Set up to 8 patterns per day including temperature control

The Weekly Timer enables the setting of operation start and finish times and adjusting the temperature as standard features. Up to 8 patterns per day can be set, providing operation that matches the varying conditions of each period, such as the number of customers in the store.

*Weekly Timer cannot be used when On/Off Timer is in use.

■ Setting Example
(restaurant in summer time)



Necessary to change temperature settings for cooling/heating times.
*Joint research conducted with Japan Facility Solutions, Inc.

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CONTROL TECHNOLOGIES

Installation/Maintenance Support Functions

Smooth Maintenance

Outdoor unit data accessed immediately, enabling fast maintenance (only PUHZ type)

Using the Stable Operation Control (fixed frequency) of the Smooth Maintenance function, the operating status of the inverter can be checked easily via the screen on the remote controller.

■ Smooth Maintenance Function Operating Procedure

Display information (11 items)

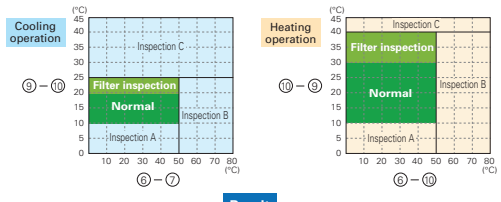
Compressor		⑥	OU TH4 temp. (°C)
①	COMP. current (A)	⑦	OU TH6 temp. (°C)
②	COMP. run time (Hr)	⑧	OU TH7 temp. (°C)
③	COMP. ON/OFF (times)	Indoor Unit	
④	COMP. frequency (Hz)	⑨	IU air temp. (°C)
Outdoor Unit		⑩	IU HEX temp. (°C)
⑤	Sub cool (°C)	⑪	IU filter operating time* (Hr)

*IU filter operating time is the time elapsed since filter was reset.

Inspection Guidelines

The computed temperature difference is plotted as in the graph below and operating status is determined.

		Item
Cooling	Temp. difference	(⑥ OU TH4 temp.) – (⑦ OU TH6 temp.)
		(⑨ IU air temp.) – (⑩ IU HEX temp.)
Heating		(⑥ OU TH4 temp.) – (⑩ IU HEX temp.)
		(⑩ IU HEX temp.) – (⑨ IU air temp.)



Normal	Normal operating status.
Filter inspection	Filter may be blocked.*1
Inspection A	Capacity is reduced. Detailed inspection is necessary.
Inspection B	Refrigerant level is low.
Inspection C	Filter or indoor unit heat exchanger is blocked.

*1: Due to indoor and outdoor temperatures, "Filter inspection" may be displayed even if the filter is not blocked.

* The above graphs are based on trial data. Results may vary depending on installation/temperature conditions.

- Stable operation may not be possible under the following temperature conditions:
  a) In cooling mode when the outdoor induction temperature is over 40°C or the indoor induction temperature is below 23°C.
  b) In heating mode when the outdoor induction temperature is over 20°C or when the indoor induction temperature is over 25°C.
- If the above temperature conditions do not apply and stable operation is not achieved after 30 minutes has passed, please inspect the units.
- The operating status may change due to frost on the outdoor heat exchanger.

Manual Vane Angle Setting (4-way ceiling cassette)

Direction of vertical airflow for each vane can be set

Setting the vertical airflow direction for each individual vane can be performed simply via illustrated display. Seasonal settings such as switching between cooling and heating are easily changed as well.

Auto-descending Panel Operation

Easily raise/lower panels using the remote controller

Auto-descending panel operation is available as an option. Panels can be lowered/raised using a button on the wired remote controller. Filter cleaning can be performed easily.

Refrigerant Leakage Check

Easily check refrigerant leakage

The Mr. Slim Power Inverter units come equipped with a useful "Refrigerant Leakage Check" function. Using a wired remote controller, it is easy to check if refrigerant has been lost over a long period of use. This reduces service time and gives an added sense of safety.

Silent Mode

Three outdoor noise level setting

The outdoor noise level can be reduced on demand according to the surrounding environment. Select from three setting mode: standard mode (rated), silent mode and ultra-silent mode.

Initial Password Setting

Password for initial settings

A password is required (default setting is "0000") for initial settings such as time and display language.

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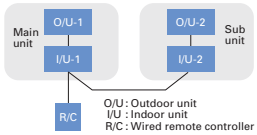
Rotation, Back-up and 2nd Stage Cut-in Functions (PAR-31MAA and PAR-21MAA)

(1) Rotation and Back-up Functions

Function Outline

- Main and sub units take turns operating according to a rotation interval setting.
- If one unit malfunctions, the other unit automatically begins operation (Back-up function)

System Image



(2) 2nd Stage Cut-in Function

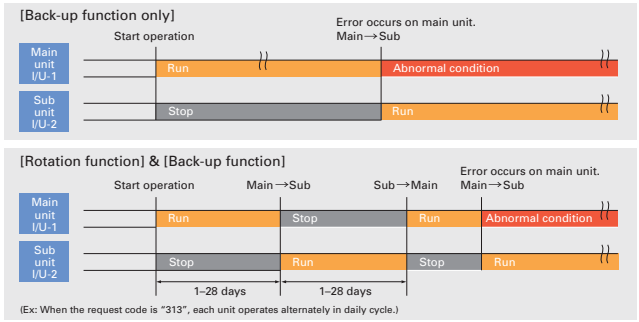
Function Outline

- Number of units operating is based on room temperature and predetermined settings.
- When room temperature rises above the desired setting, the standby unit starts (2-unit operation).
- When the room temperature falls 4°C below the predetermined setting, the standby unit stops (1-unit operation).

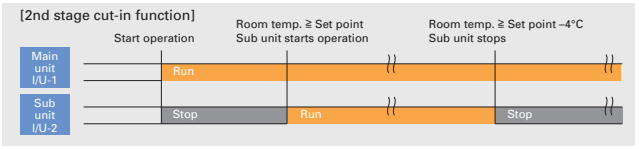
System Constraint

- This function is only available for rotation operation and when the back-up function is in cooling mode.

Operation Pattern



Operation Pattern



New Simple MA Remote Controller
PAC-YT52CRA

New

Backlit LCD

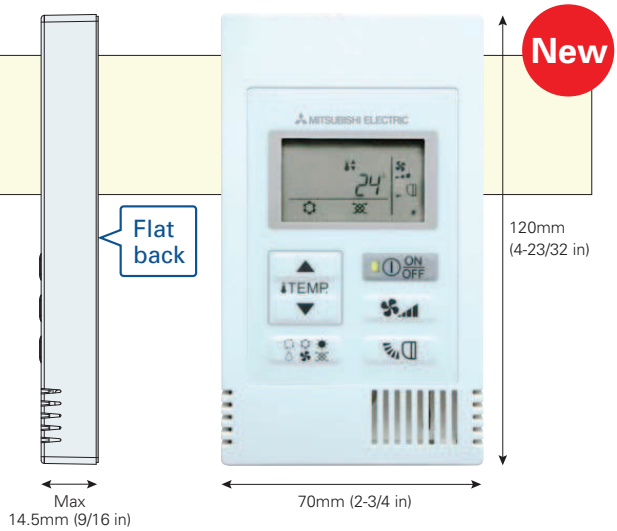
Features a liquid-crystal display (LCD) with backlight for operation in dark conditions.

Flat Back

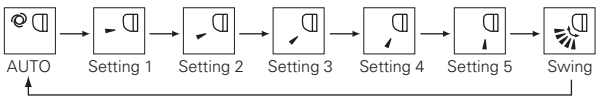
The slim and flat-back shape makes installation easier without requiring a hole in the wall. Thickness is 14.5mm or less.

Vane Angle Setting

The vane button has been added to allow users to change the airflow direction (ceiling-cassette and wall-mounted units).



Pressing the button will switch the vane direction.



* The settable vane directions vary depending on the indoor unit model to be connected.

* If the unit has no vane function, the vane direction cannot be set. In this case, the vane icon flashes when the button is pressed.

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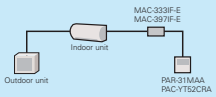
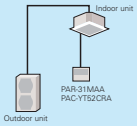
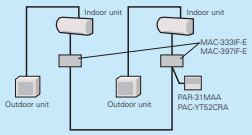
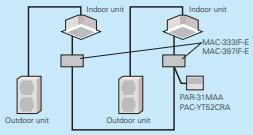
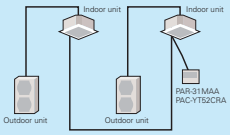
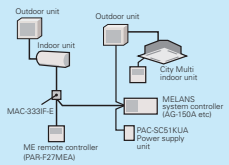
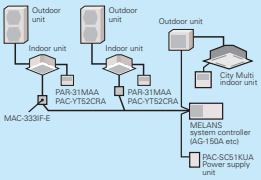
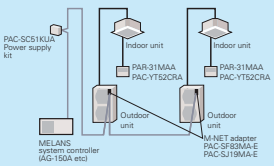
SYSTEM CONTROL

Versatile system controls can be realised using optional parts, relay circuits, control panels, etc.

MAJOR SYSTEM CONTROL

	System Examples		
Indoor Unit	M Series Indoor Unit	S Series & P Series Indoor Unit	P Series Indoor Unit
Outdoor Unit	M Series and MXZ Series Outdoor	S Series and MXZ Series Outdoor	P Series Outdoor
PAR-31MAA Control PAC-YT52CRA Control			
Details	• Wired remote controller can be connected to indoor unit	Standard equipment (for indoor units compatible with wired remote controllers)	
Major Optional Parts Required	• MAC-333IF-E or MAC-397IF-E (Interface) • PAR-31MAA (Wired remote controller) • PAC-YT52CRA (Wired remote controller)	• PAR-31MAA (Wired remote controller) • PAC-YT52CRA (Wired remote controller)	
System Group Control			
Details	• One remote controller can control plural air conditioners with the same settings simultaneously. • One remote controller can control up to 16 refrigerant systems. (When connected to a MXZ unit, MAC-333IF-E or MAC-397IF-E is counted as one system.) • Up to two remote controller can be connected.		
Major Optional Parts Required	• MAC-333IF-E or MAC-397IF-E (Interface) • PAR-31MAA (Wired remote controller) • PAC-YT52CRA (Wired remote controller)		• PAR-31MAA (Wired remote controller) • PAC-YT52CRA (Wired remote controller)
M-NET Connections			
Details	• Group of air conditioners can be controlled by MELANS system controller (M-NET).		
Major Optional Parts Required	• MAC-333IF-E (M-NET Interface) • MELANS System controller • PAC-SC51KUA (power supply unit)		• PAC-SF83MA-E or PAC-SJ19MA-E (M-NET converter) • MELANS System controller • PAC-SC51KUA (power supply unit)

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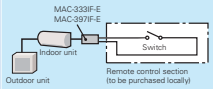
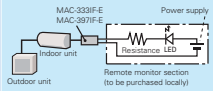
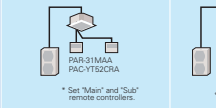
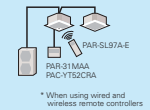
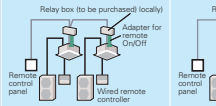
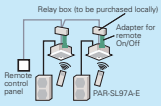
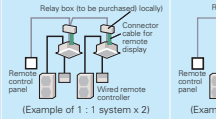
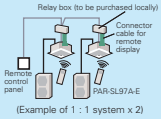
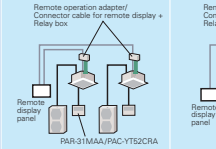
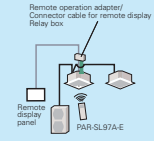
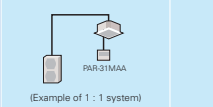
OTHERS

For M Series Indoor Units (New A-control Models Only)

	System Examples	Connection Details	Control Details	Major Optional Parts Required
1 Remote On/Off Operation • Air conditioner can be started/stopped remotely. (1 and 2 can be used in combination)		Connect the interface to the air conditioner. Then connect the locally purchased remote controller to the terminal in the interface.	On/Off operation is possible from a remote location.	• **MAC-333IF-E or MAC-397IF-E** (Interface) • Parts for circuit such as relay box, lead wire, etc. (to be purchased locally)
2 Remote Display of Operation Status • The On/Off status of air conditioners can be confirmed remotely. (1 and 2 can be used in combination)		Connect the interface to the air conditioner. Then connect the locally purchased remote controller to the terminal in the interface.	The operation status (On/Off) or error signals can be monitored from a remote location.	• **MAC-333IF-E or MAC-397IF-E** (Interface) • Parts for circuit to be purchased locally (DC power source needed) • External power source (12V DC) is required when using MAC-333IF-E.

For P Series and S Series Indoor Units

	System Examples		Details	Major Optional Parts Required
	Wired remote controller	Wireless remote controller		
A 2-remote Controller Control With two remote controllers, control can be performed locally and remotely from two locations.	 (Example of 1 : 1 system)	 (Example of Simultaneous Twin)	• Up to two remote controllers can be connected to one group. • Both wired and wireless remote controllers can be used in combination.	• Wired Remote Controller **PAR-31MAA** **PAC-YT52CRA** (for PKA, **PAC-SH29TC-E** is required) • Wireless Remote Controller **PAR-SL97A-E** (Except for SLZ) • Wireless Remote Controller Kit for PCA **PAR-SL99B-E**
B Operation Control by Level Signal Air conditioner can be started/stopped remotely. In addition, On/Off operation by local remote controller can be prohibited/permitted.	 (Example of 1 : 1 system x 2)	 (Example of 1 : 1 system x 2)	• Operation other than On/Off (e.g., adjustment of temperature, fan speed, and airflow) can be performed even when remote controller operation is prohibited. • Timer control is possible with an external timer.	• Adapter for remote On/Off **PAC-SE55RA-E** • Relay box (to be purchased locally) • Remote control panel (to be purchased locally)
C Operation Control by Pulse Signal	 (Example of 1 : 1 system x 2)	 (Example of 1 : 1 system x 2)	• The pulse signal can be turned On/Off. • Operation/emergency signal can be received at a remote location.	• Connector cable for remote display **PAC-SA88HA-E / PAC-725AD** **(10 pcs. x PAC-SA88HA-E)** • Relay box (to be purchased locally) • Remote control panel (to be purchased locally)
D Remote Display of Operating Status Operating status can be displayed at a remote location.	 (Example of 1 : 1 system)	 (Example of Simultaneous Twin)	• Operation/emergency signal can be received at a remote location (when channeled through the **PAC-SF40RM-E** → no-voltage signal, when channeled through the **PAC-SA88HA-E** → DC 12V signal).	• Remote display panel (to be purchased locally) • Connector cable for remote display **PAC-SA88HA-E / PAC-725AD** **(10 pcs. x PAC-SA88HA-E)** • Relay box (to be purchased locally) • Remote operation adapter **PAC-SF40RM-E** *Unable to use with wireless remote controller
E Timer Operation Allows On/Off operation with timer *For control by an external timer, refer to B Operation Control by Level Signal.	 (Example of 1 : 1 system)		• **Weekly Timer:** On/Off and up to 8 pattern temperatures can be set for each calendar day. (Initial setting) • **On/Off Timer:** On/Off can be set once each within 72 hr in intervals of 5-minute units. • **Auto-off Timer:** Operation will be switched off after a certain time elapse. Set time can be changed from 30 min. to 4 hr. at 10 min. intervals. *Simple Timer and Auto-off Timer cannot be used at the same time.	Standard functions of **PAR-31MAA**

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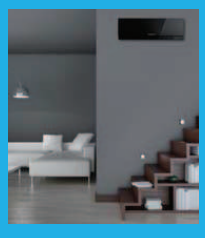
M SERIES



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SELECTION

Choose the model that best matches room conditions.

STEP 1 SELECT SERIES

A multiple series line-up to choose from, each with various outstanding features. In addition to inverter-equipped models, constant-speed, floor-standing and cassette models can be selected. Choose the best series to match usage needs.

Wall-mounted Units

MSZ-F SERIES

DC Inverter | Super energy-saving | SEER 25/35 A+++ SCOP 25/35 A+++ | Ultra-quiet 25/35 | Cooling Heating | MXZ connection

MSZ-E SERIES

DC Inverter | SEER 25/35 A+++ SCOP 25/35 A++ | Cooling Heating | MXZ connection

MSZ-S SERIES

DC Inverter | SEER A++ SCOP A+ | Cooling Heating | MXZ connection

MSZ-G SERIES

DC Inverter | SEER A++ SCOP A+ | Cooling Heating | MXZ connection

MSZ-H SERIES

DC Inverter | SEER 50 A+ SCOP 50 A+ | Cooling Heating | MXZ connection

Floor-standing

MFZ SERIES

DC Inverter | Cooling Heating | MXZ connection | SEER 25 A+++ SCOP A+++

Cassette Units

MLZ SERIES

DC Inverter | Cooling Heating | MXZ connection ✻ MXZ connection only

DC Inverter Inverter | Super energy-saving Super energy-saving | SEER A SCOP A Energy Rank | Ultra-quiet Ultra-quiet operation | Cooling Heating Cooling and heating operation

MXZ connection Compatible for connection to MXZ Series system ✻ To confirm compatibility with the MXZ Series multi-type system, refer to the MXZ Series page.

STEP 2 SELECT OUTDOOR UNIT

Some outdoor units in the line-up have heaters for use in cold regions. Units with an "H" in the model name are equipped with heaters.

Heater Installed

MUZ-FH25/35VEHZ
MUZ-EF25/35VEH
MUZ-SF25/35/42VEH
MUFZ-KJ25/35VEHZ

MUZ-FH50VEHZ
MUZ-SF50VEH
MUFZ-KJ50VEHZ

Selecting a Heater-equipped Model

In regions with the following conditions, there is a possibility that water resulting from condensation on the outdoor unit when operating in the heating mode will freeze and not drain from the base.

1) Cold outdoor temperatures (temperature does not rise above 0°C all day)
2) Areas where dew forms easily (in the mountains, valleys(surrounded by mountains), near a forest, near unfrozen lakes, ponds, rivers or hot springs), or areas with snowfall

To prevent water from freezing in the base, it is recommended that a unit with a built-in heater be purchased. Please ask your dealer representative about the best model for you.

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霧ヶ峰
KIRIGAMINE

MSZ-F SERIES

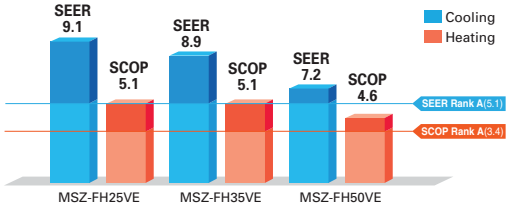
MSZ-FH25/35/50VE

The F Series is designed for optimum cooling/heating performance as well as operational comfort. Quiet, energy-saving operation is supported by some of Mitsubishi Electric's latest technologies. Advanced functions such as "3D i-see Sensor" temperature control and the Plasma Quad air purification system raise room comfort levels to new heights.

High Energy Efficiency

DC Inverter 25/35 SEER A+++ 25/35 SCOP A+++

Power consumption has been reduced for the cooling and heating modes thanks to the incorporation of our newest inverter technologies. The high energy efficiency of the Size 25 units has obtained a rating of more than 5.0 for both seasonal coefficient of performance (SCOP) and seasonal energy efficiency rating (SEER).

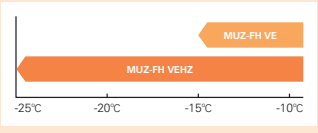


Hyper Heating

The Hyper Heating feature is incorporated, realizing powerful heating even in the harsh cold. Even users in cold regions can comfortably rely on the MSZ-FH Series for all their heating needs.

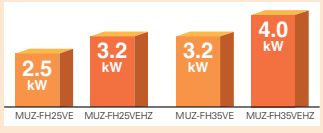
Operation Guaranteed at Outside Temperature of -25°C

MUZ-FH VEHZ can be operated at outside temperatures as low as -25°C, so there are no concerns about use even in very cold climates.



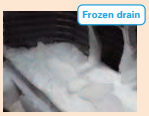
Rated Capacity Demonstrated at Outside Temperatures of -15°C

With rated capacity ensured at outside temperature as low as -15°C, the FH Series can be relied upon to properly warm living spaces even in severe cold snaps.



Freeze-prevention Heater Equipped as Standard (VEHZ)

The Freeze-prevention heater prevents lowered capacity due to the drain freezing and also inhibits operation shutdowns.



Without Freeze-prevention heater

With Freeze-prevention heater

Selecting a Heater-equipped Model

In regions with the following conditions, there is a possibility that water resulting from condensation on the outdoor unit when operating in the heating mode will freeze and not drain from the base.

1) Cold outdoor temperatures (temperature does not rise above 0°C all day)
2) Areas where dew forms easily (in the mountains, valleys(surrounded by mountains), near a forest, near unfrozen lakes, ponds, rivers or hot springs), or areas with snowfall

To prevent water from freezing in the base, it is recommended that a unit with a built-in heater be purchased. Please ask your dealer representative about the best model for you.

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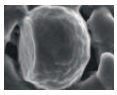
Plasma Quad

Air, like water, is something we use everyday unconsciously. Yet, clean, fresh air is a vital part of creating a healthy space for humans. Achieving this healthy air is Plasma Quad, a plasma-based filter system that effectively removes four kinds of air pollutants; namely, bacteria, viruses, allergens and dust, which the air contains countless particles of.

Bacteria

Test results have confirmed that Plasma Quad neutralizes 99% of bacteria in 115 minutes in a 25m³ test space.

Plasma Quad off



Plasma Quad on

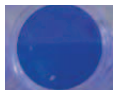
〈Test No.〉KRCES-Bio.Test Report No.23_0371

Viruses

Test results have confirmed that Plasma Quad neutralizes 99% of virus particles in 65 minutes in a 25m³ test space.

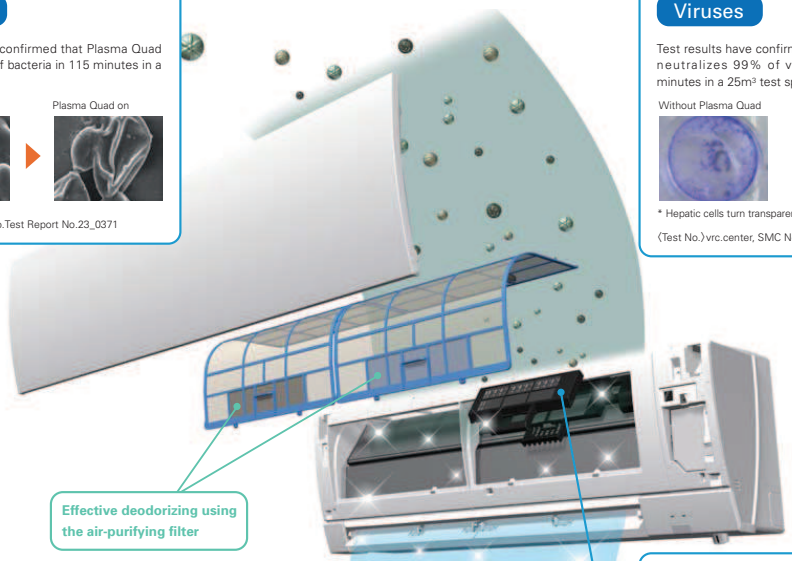
Without Plasma Quad

With Plasma Quad



* Hepatic cells turn transparent when affected by a virus.

〈Test No.〉vrc.center, SMC No.23-002



Effective deodorizing using the air-purifying filter

Allergens

In a test, air containing cat fur and pollen was passed through the air cleaning device at the low airflow setting. Before and after measurements confirm that Plasma Quad neutralizes 94% of cat fur and 98% of pollen.

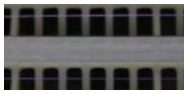
〈Test No.〉ITEA No.12M-RPTFEBO22

Dust

In a test, air containing dust and ticks was passed through the air cleaning device at the low airflow setting. Before and after measurements confirm that Plasma Quad removes 88.6% of dust and ticks.

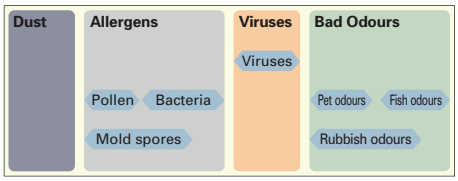
〈Test No.〉ITEA No.12M-RPTFEBO22

(Image)



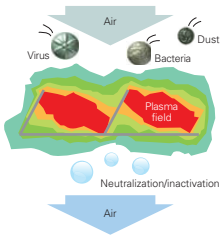
[Effective Range]

Macro ← Particulate size → Nano

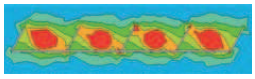


Principle of Plasma Quad

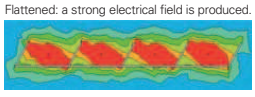
Plasma Quad attacks bacteria and viruses from inside the unit using a strong curtain-like electrical field and discharge of electric current across the whole inlet-air opening of the unit. Tungsten discharge electrodes are used as they provide both discharge capacity and strength. In addition, through flattening the standard, round form of the field to a ribbon-like shape, a strong electrical field is produced.



Round:



Flattened: a strong electrical field is produced.



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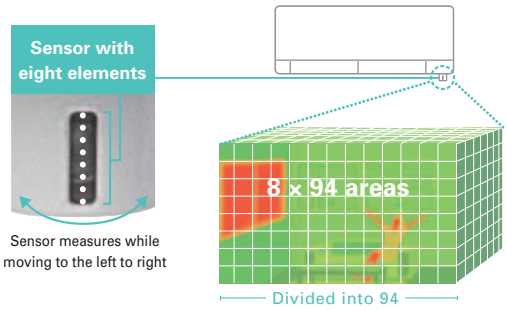
3D i-see Sensor

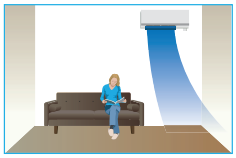
The FH Series is equipped with 3D i-see Sensor, an infrared-ray sensor that measures the temperature at distant positions. While moving to the left and right, eight vertically arranged sensor elements analyze the room temperature in three dimensions. This detailed analysis makes it possible to judge where people are in the room, thus allowing creation of features such as "Indirect airflow," to avoid airflow hitting people directly, and "direct airflow" to deliver airflow to where people are.



(Image)

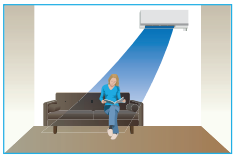
Indirect Airflow

The indirect airflow setting can be used when the flow of air feels too strong or direct. For example, it can be used during cooling to avert airflow and prevent body temperature from becoming excessively cooled.



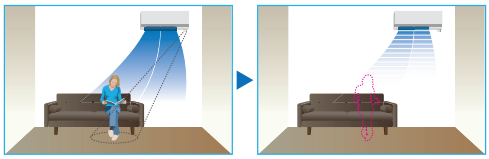
Direct Airflow

This setting can be used to directly target airflow at people such as for immediate comfort when coming indoors on a hot (cold) day.



Absence Detection

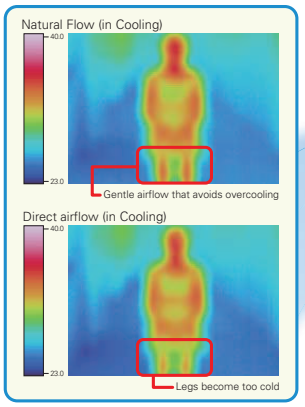
The sensors detect whether there are people in the room. When no-one is in the room, the unit automatically switches to energy-saving mode.



The "3D i-see Sensor" detects people's absence and the power consumption is automatically reduced approximately 10% after 10 minutes and 20% after 60 minutes.

Natural Flow

To create "healthy" airflow, the most important aspect is that the flow of air feels natural. Mitsubishi Electric's solution to this is Natural Flow, only possible thanks to our technology that freely and flexibly controls airflow.



Double Vane

Mitsubishi Electric's double vane separates the airflow in the left and right directions to deliver airflow not only across a wide area of the room, but also simultaneously to two people in different locations.

Through realizing airflow that imitates a natural breeze, we have avoided the unpleasant feeling of being hit directly by constant, unnatural airflow.

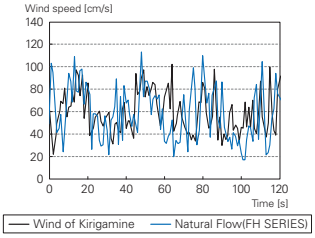
Base data for Natural Flow

Kirigamine Highland

measuring actual data of natural wind

Kirigamine Highland is one of the most famous sightseeing spots in Japan, and is visited by a large number of people for its pleasant and comfortable environment. At Mitsubishi Electric, we have attempted to recreate this Kirigamine Highland comfort. As part of development, seeking to create a natural airflow, we measured actual data on the refreshing breezes of Kirigamine Highland. Through imitating the natural waveforms of this data, we have been able to recreate almost-imperceptible currents of gently comforting airflow.

Analysis of natural wind



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MSZ-F SERIES

EUROVENT CERTIFIED PERFORMANCE

DC Inverter · Joint Lap · DC Fan Motor · PAM · Grooved Piping · 25 / 35 SEER A+++ · 25 / 35 SCOP A+++

Indoor Unit

MSZ-FH25/35/50VE

Outdoor Unit

MUZ-FH25/35VE

MUZ-FH50VE

Remote Controller

3D i-see Sensor · AREA · HUMAN · Econo Cool · Pure White · AUTO VANE · Plasma Quad · SWING · SWING VERTICAL · Natural Flow HORIZONTAL · AUTO · i save · 24-hour Timer · ECO · Auto Restart · Low Temp Cooling

Optional: PAC · Group Control · M-NET connection · Wi-Fi Interface · MXZ connection · Cleaning of the pipe route · Flare connection · Self Diagnosis · Failure Recall

Type				Inverter Heat Pump		
Indoor Unit				MSZ-FH25VE	MSZ-FH35VE	MSZ-FH50VE
Outdoor Unit				MUZ-FH25VE	MUZ-FH35VE	MUZ-FH50VE
Refrigerant				R410A(*1)		
Power Supply	Source			Outdoor Power supply		
	Outdoor (V / Phase / Hz)			230/Single/50		
Cooling	Design load		kW	2.5	3.5	5.0
	Annual electricity consumption (*2)		kWh/a	96	138	244
	SEER (*4)			9.1	8.9	7.2
		Energy efficiency class		A+++	A+++	A++
	Capacity	Rated	kW	2.5	3.5	5.0
		Min-Max	kW	1.4-3.5	0.8-4.0	1.9-6.0
	Total Input	Rated	kW	0.485	0.820	1.380
Heating (Average Season)(*5)	Design load		kW	3.0(-10°C)	3.6(-10°C)	4.5(-10°C)
	Declared Capacity	at reference design temperature	kW	3.0(-10°C)	3.6(-10°C)	4.5(-10°C)
		at bivalent temperature	kW	3.0(-10°C)	3.6(-10°C)	4.5(-10°C)
		at operation limit temperature	kW	2.5(-15°C)	3.2(-15°C)	5.2(-15°C)
	Back up heating capacity		kW	0.0(-10°C)	0.0(-10°C)	0.0(-10°C)
	Annual electricity consumption (*2)		kWh/a	819	986	1372
	SCOP (*4)			5.1	5.1	4.6
		Energy efficiency class		A+++	A+++	A++
	Capacity	Rated	kW	3.2	4.0	6.0
		Min-Max	kW	1.8-5.5	1.0-6.3	1.7-8.7
	Total Input	Rated	kW	0.580	0.800	1.480
Operating Current (Max)			A	9.6	10.0	14.0
Indoor Unit	Input	Rated	kW	0.029	0.029	0.031
	Operating Current(Max)		A	0.4	0.4	0.4
	Dimensions	H*W*D	mm	305(+17)-925-234	305(+17)-925-234	305(+17)-925-234
	Weight		kg	13.5	13.5	13.5
	Air Volume (SLo-Lo-Mid-Hi-SHi(*3)) (Dry/Wet))	Cooling	m^3/min	3.9-4.7-6.3-8.6-11.6	3.9-4.7-6.3-8.6-11.6	6.4-7.4-8.6-10.1-12.4
		Heating	m^3/min	4.0-4.7-6.4-9.2-13.2	4.0-4.7-6.4-9.2-13.2	5.7-7.2-9.0-11.2-14.6
	Sound Level (SPL) (SLo-Lo-Mid-Hi-SHi(*3))	Cooling	dB(A)	20-23-29-36-42	21-24-29-36-42	27-31-35-39-44
		Heating	dB(A)	20-24-29-36-44	21-24-29-36-44	25-29-34-39-46
	Sound Level (PWL)	Cooling	dB(A)	58	58	60
Outdoor Unit	Dimensions	H*W*D	mm	550-800-285	550-800-285	880-840-330
	Weight		kg	37	37	55
	Air Volume	Cooling	m^3/min	31.3	33.6	48.8
		Heating	m^3/min	31.3	33.6	51.3
	Sound Level (SPL)	Cooling	dB(A)	46	49	51
		Heating	dB(A)	49	50	54
	Sound Level (PWL)	Cooling	dB(A)	60	61	64
	Operating Current (Max)		A	9.6	9.6	13.6
	Breaker Size		A	9.2	10	16
Ext. Piping	Diameter	Liquid/Gas	mm	6.35/9.52	6.35/9.52	6.35 / 12.7
	Max.Length	Out-In	m	20	20	30
	Max.Height	Out-In	m	12	12	15
Guaranteed Operating Range (Outdoor)		Cooling	°C	-10 ~ +46	-10 ~ +46	-10 ~ +46
		Heating	°C	-15 ~ +24	-15 ~ +24	-15 ~ +24

(*1) Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to 1975. This means that if 1 kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 1975 times higher than 1 kg of CO_2, over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional.
(*2) Energy consumption based on standard test results.Actual energy consumption will depend on how the appliance is used and where it is located.
(*3) SHi: Super High
(*4) SEER, SCOP and other related description are based on COMMISSION DELEGATED REGULATION (EU) No.626/2011. The temperature conditions for calculating SCOP are based on "Average Season".
(*5) Please see page 47 for heating (warmer season) specifications.

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KIRIGAMINE 禅 ZEN

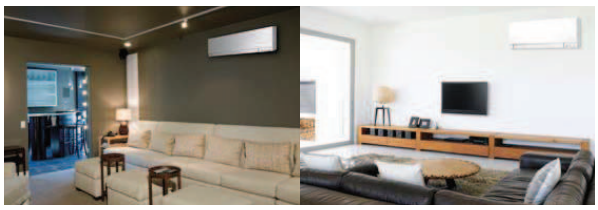
MSZ-E SERIES

Developed to complement modern interior room décor, Kirigamine ZEN air conditioners are available in three colours specially chosen to blend in naturally wherever installed.

MSZ-EF18-50VE2B

Stylish Line-up Matches Any Room Décor

The streamlined wall-mounted indoor units have eloquent silver-bevelled edges, expressing sophistication and quality. Combining impressively low power consumption and quiet yet powerful performance, these units provide a best-match scenario for diverse interior designs while simultaneously ensuring maximum room and energy savings.



Energy-efficient Operation

DC Inverter

25-35 SEER A+++ 25-42* SCOP A++ *except for VEH

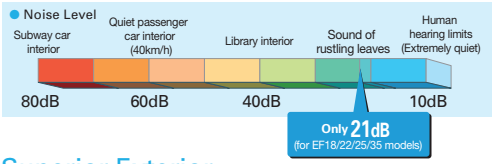
All models in the series have achieved high energy-savings rating, and are contributing to reduced energy consumption in homes, offices and a range of other settings. Offered in a variety of output capacities and installation patterns, the vast applicability promises an ideal match for any user.

Indoor \ Outdoor	Rank A for single connection	Compatibility								
	MUZ-EF25/35VE(H) MUZ-EF42/50VE	MXZ								
		2D33VA	2D40VA	2D53VA	3D54VA	3D68VA	4D72VA	4D83VA	5D102VA	6C122VA
MSZ-EF18VE2	–	✓	✓	✓	✓	✓	✓	✓	✓	✓
MSZ-EF22VE2	–	✓	✓	✓	✓	✓	✓	✓	✓	✓
MSZ-EF25VE2	A⁺⁺⁺/A⁺⁺(A⁺⁺*)	✓	✓	✓	✓	✓	✓	✓	✓	✓
MSZ-EF35VE2	A⁺⁺⁺/A⁺⁺(A⁺*)		✓	✓	✓	✓	✓	✓	✓	✓
MSZ-EF42VE2	A⁺⁺/A⁺⁺			✓	✓	✓	✓	✓	✓	✓
MSZ-EF50VE2	A⁺⁺/A⁺			✓	✓	✓	✓	✓	✓	✓

*VEH

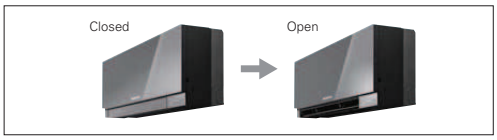
Quiet Comfort All Day Long

Mitsubishi Electric's advanced "Silent Mode" fan speed setting provides super-quiet operation as low as 21dB for EF18/22/25/35 models. This unique feature makes the Kirigamine ZEN series ideal for use in any situation.



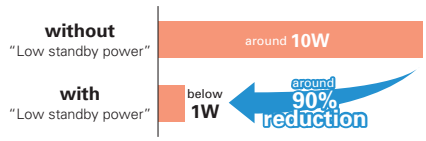
Superior Exterior and Operating Design Concept

The indoor unit of the Kirigamine ZEN keeps its amazingly thin form even during operation. The only physical change notable is the movement of the variable vent. As a result, a slim attractive look is maintained.



Low Standby Power

Electrical devices consume standby power even when they are not in actual use. While we obviously strive to reduce power consumption during actual use, reducing this wasted power that cannot be seen is also very important.



Outdoor Units for Cold Region (25/35)

Single split-type outdoor units are available in both standard and heater-equipped units. An electric heater is installed in each unit to prevent freezing in cold outdoor environments.

Standard Units

MUZ-EF25/35VE

Heater Installed

MUZ-EF25/35VEH

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MSZ-E SERIES

EUROVENT CERTIFIED PERFORMANCE

DC Inverter | Joint Lap | DC Fan Motor | PAM | Grooved Piping | SEER 25 - 35 A+++ | SCOP 25 - 42* A++ *except for VE1

Indoor Unit

MSZ-EF18/22/25/35/42/50VE2W White

MSZ-EF18/22/25/35/42/50VE2S Silver

MSZ-EF18/22/25/35/42/50VE2B* Black

*Soft-dry Cloth is enclosed with Black models.

Outdoor Unit

MUZ-EF25/35VE(H),42VE

MUZ-EF50VE

Remote Controller

Econo Cool | Pure White | AUTO VANE | Electrostatic Anti-allergy | SWING | AUTO | Weekly Timer | i save | ACO | Auto Restart | Low Temp Cooling | Centralised On/Off Optional | Group Control Optional | Wi-Fi Interface

MXZ connection | Cleaning-free, one touch | Fibre connection | Self Diagnosis | Failure Recall

Type				Inverter Heat Pump							
Indoor Unit				MSZ-EF18VE2	MSZ-EF22VE2	MSZ-EF25VE2	MSZ-EF25VE2	MSZ-EF35VE2	MSZ-EF35VE2	MSZ-EF42VE2	MSZ-EF50VE2
Outdoor Unit				for MXZ connection		MUZ-EF25VE	MUZ-EF25VEH	MUZ-EF35VE	MUZ-EF35VEH	MUZ-EF42VE	MUZ-EF50VE
Refrigerant				R410A(*1)							
Power Supply	Source			Outdoor Power supply							
	Outdoor (V / Phase / Hz)			230/Single/50							
Cooling	Design load		kW	-	-	2.5	2.5	3.5	3.5	4.2	5.0
	Annual electricity consumption (*2)		kWh/a	-	-	103	103	144	144	192	244
	SEER (*4)			-	-	8.5	8.5	8.5	8.5	7.7	7.2
		Energy efficiency class		-	-	A+++	A+++	A+++	A+++	A++	A++
	Capacity	Rated	kW	-	-	2.5	2.5	3.5	3.5	4.2	5.0
		Min-Max	kW	-	-	1.2-3.4	1.2-3.4	1.4-4.0	1.4-4.0	0.9-4.6	1.4-5.4
	Total Input	Rated	kW	-	-	0.545	0.545	0.910	0.910	1.280	1.560
Heating (Average Season)(*5)	Design load		kW	-	-	2.4(-10°C)	2.4(-10°C)	2.9(-10°C)	2.9(-10°C)	3.8(-10°C)	4.2(-10°C)
	Declared Capacity	at reference design temperature	kW	-	-	2.4(-10°C)	2.4(-10°C)	2.9(-10°C)	2.9(-10°C)	3.8(-10°C)	4.2(-10°C)
		at bivalent temperature	kW	-	-	2.4(-10°C)	2.4(-10°C)	2.9(-10°C)	2.9(-10°C)	3.8(-10°C)	4.2(-10°C)
		at operation limit temperature	kW	-	-	2.0(-15°C)	1.6(-20°C)	2.4(-15°C)	1.7(-20°C)	3.4(-15°C)	3.5(-15°C)
	Back up heating capacity		kW	-	-	0.0(-10°C)	0.0(-10°C)	0.0(-10°C)	0.0(-10°C)	0.0(-10°C)	0.0(-10°C)
	Annual electricity consumption (*2)		kWh/a	-	-	716	730	882	910	1155	1309
	SCOP (*4)			-	-	4.7	4.6	4.6	4.5	4.6	4.5
		Energy efficiency class		-	-	A++	A++	A++	A+	A++	A+
	Capacity	Rated	kW	-	-	3.2	3.2	4.0	4.0	5.4	5.8
		Min-Max	kW	-	-	1.1-4.2	1.1-4.2	1.8-5.5	1.8-5.5	1.4-6.3	1.6-7.5
	Total Input	Rated	kW	-	-	0.700	0.700	0.955	0.955	1.460	1.565
Operating Current (Max)			A	-	-	7.3	7.3	8.5	8.5	9.5	12.4
Indoor Unit	Input	Rated	kW	0.027	0.027	0.027	0.027	0.031	0.031	0.031	0.034
	Operating Current(Max)		A	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4
	Dimensions	H*W*D	mm	299-895-195	299-895-195	299-895-195	299-895-195	299-895-195	299-895-195	299-895-195	299-895-195
	Weight		kg	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5
	Air Volume (SLo-Lo-Mid-Hi-SHi(*3)) (Dry/Wet))	Cooling	m^3/min	4.0 - 4.6 - 6.3 - 8.3 - 10.5	4.0 - 4.6 - 6.3 - 8.3 - 10.5	4.0 - 4.6 - 6.3 - 8.3 - 10.5	4.0 - 4.6 - 6.3 - 8.3 - 10.5	4.0 - 4.6 - 6.3 - 8.3 - 10.5	4.0 - 4.6 - 6.3 - 8.3 - 10.5	5.8 - 6.6 - 7.7 - 8.9 - 10.3	5.8 - 6.8 - 7.9 - 9.3 - 11.0
		Heating	m^3/min	4.0 - 4.6 - 6.2 - 8.9 - 11.9	4.0 - 4.6 - 6.2 - 8.9 - 11.9	4.0 - 4.6 - 6.2 - 8.9 - 11.9	4.0 - 4.6 - 6.2 - 8.9 - 11.9	4.0 - 4.6 - 6.2 - 8.9 - 12.7	4.0 - 4.6 - 6.2 - 8.9 - 12.7	5.5 - 6.3 - 7.8 - 9.9 - 12.7	6.4 - 7.3 - 9.0 - 11.1 - 13.2
	Sound Level (SPL) (SLo-Lo-Mid-Hi-SHi(*3))	Cooling	dB(A)	21 - 23 - 29 - 36 - 42	21 - 23 - 29 - 36 - 42	21 - 23 - 29 - 36 - 42	21 - 23 - 29 - 36 - 42	21 - 24 - 29 - 36 - 42	21 - 24 - 29 - 36 - 42	28 - 31 - 35 - 39 - 42	30 - 33 - 36 - 40 - 43
		Heating	dB(A)	21 - 24 - 29 - 37 - 45	21 - 24 - 29 - 37 - 45	21 - 24 - 29 - 37 - 45	21 - 24 - 29 - 37 - 45	21 - 24 - 30 - 38 - 46	21 - 24 - 30 - 38 - 46	28 - 30 - 35 - 41 - 48	30 - 33 - 37 - 43 - 49
	Sound Level (PWL)	Cooling	dB(A)	-	-	60	60	60	60	60	60
Outdoor Unit	Dimensions	H*W*D	mm	-	-	550-800-285	550-800-285	550-800-285	550-800-285	550-800-285	880-840-330
	Weight		kg	-	-	30	30	35	35	35	54
	Air Volume	Cooling	m^3/min	-	-	32.6	32.6	33.6	33.6	35.2	44.6
		Heating	m^3/min	-	-	32.2	32.2	33.6	33.6	33.6	44.6
	Sound Level (SPL)	Cooling	dB(A)	-	-	47	47	49	49	50	52
		Heating	dB(A)	-	-	48	48	50	50	51	52
	Sound Level (PWL)	Cooling	dB(A)	-	-	58	58	61	61	62	65
	Operating Current (Max)		A	-	-	7.0	7.0	8.2	8.2	9.2	12.0
	Breaker Size		A	-	-	10	10	10	10	10	16
Ext. Piping	Diameter	Liquid/Gas	mm	-	-	6.35 / 9.52	6.35 / 9.52	6.35 / 9.52	6.35 / 9.52	6.35 / 9.52	6.35 / 12.7
	Max.Length	Out-In	m	-	-	20	20	20	20	20	30
	Max.Height	Out-In	m	-	-	12	12	12	12	12	15
Guaranteed Operating Range (Outdoor)		Cooling	°C	-	-	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46
		Heating	°C	-	-	-15 ~ +24	-20 ~ +24	-15 ~ +24	-20 ~ +24	-15 ~ +24	-15 ~ +24

(*1) Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to 1975. This means that if 1 kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 1975 times higher than 1 kg of CO_2, over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional.
(*2) Energy consumption based on standard test results.Actual energy consumption will depend on how the appliance is used and where it is located.
(*3) SHi: Super High
(*4) SEER, SCOP and other related description are based on COMMISSION DELEGATED REGULATION (EU) No.626/2011. The temperature conditions for calculating SCOP are based on "Average Season".
(*5) Please see page 47 for heating (warmer season) specifications.

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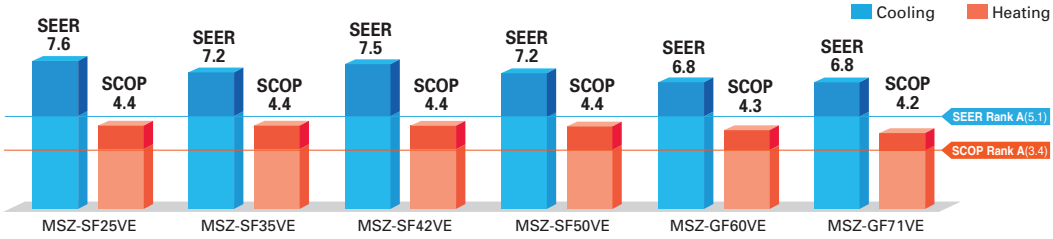
MSZ-S SERIES
MSZ-G SERIES

Introducing a compact and stylish indoor unit with amazingly quiet performance. Not only are neat installations in small bedrooms possible, increase energy-savings by selecting the optimal capacity required for each room.

"Rank A++/A+" Energy Savings Achieved for Entire Range of Series

All models in the series, from the low-capacity 25 to the high-capacity 71, have achieved the "Rank A++" for SEER and "Rank A+" for SCOP as energy-savings rating. For home use, such as in bedrooms and living rooms, to light commercial use, such as in offices, our air conditioners are contributing to reduced energy consumption in a wide range.



Wide Line-up

Eight different indoor units (Model 15-71) are available to meet your diversified air conditioning needs.

MSZ-SF15 / 20VA*
*for MXZ connection

MSZ-SF25 / 35 / 42 / 50VE

MSZ-GF60 / 71VE

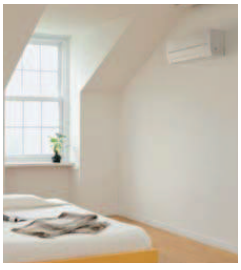
Compact and Stylish (MSZ-SF15/20VA)

The stylish, square indoor unit adds a touch of class to any room interior. The compact design is 64mm thinner than our previous indoor unit with the lowest output capacity (MSZ-GE22VA).

Comparison with our previous model GE

Family Design (MSZ-SF15/20/25/35/42/50)

Models in the 25-50 class are introduced as single-split units while retaining the popular design of the SF15/20VA* as indoor units exclusively for multi-systems. From small rooms to living rooms, it is possible to coordinate residences with a unified design.
*Size may vary.



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"Weekly Timer"

Easily set desired temperatures and operation start/stop times to match lifestyle patterns. Reduce wasted energy consumption by using the timer to prevent forgetting to turn off the unit and eliminate temperature setting adjustments.

■ **Example Operation Pattern (Winter/Heating mode)**

	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.	Sun.
6:00	ON 20°C	ON 20°C	ON 20°C	ON 20°C	ON 20°C	ON 20°C	ON 20°C
8:00	Automatically changes to high-power operation at wake-up time						
10:00	OFF	OFF	OFF	OFF	OFF	ON 18°C	ON 18°C
12:00	Automatically turned off during work hours					Midday is warmer, so the temperature is set lower	
14:00							
16:00							
18:00	ON 20°C	ON 20°C	ON 20°C	ON 20°C	ON 20°C	ON 20°C	ON 20°C
20:00	Automatically turns on, synchronized with arrival at home					Automatically raises temperature setting to match time when outside-air temperature is low	
22:00 (during sleeping hours)	ON 18°C	ON 18°C	ON 18°C	ON 18°C	ON 18°C	ON 18°C	ON 18°C
	Automatically lowers temperature at bedtime for energy-saving operation at night						

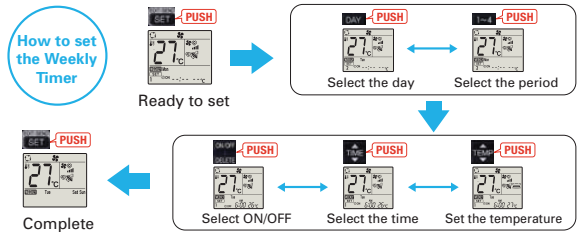
Settings

Pattern Settings: Input up to four settings for each day

Settings: •Start/Stop operation •Temperature setting ✻The operation mode cannot be set.

■ Easy set-up using dedicated buttons

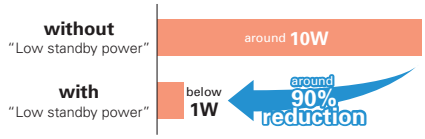
The remote controller is equipped with buttons that are used exclusively for setting the Weekly Timer. Setting operation patterns is easy and quick.



- Start by pushing the "SET" button and follow the instructions to set the desired patterns. Once all of the desired patterns are input, point the top end of the remote controller at the indoor unit and push the "SET" button one more time. (Push the "SET" button only after inputting all of the desired patterns into the remote controller memory. Pushing the "CANCEL" button will end the set-up process without sending the operation patterns to the indoor unit).
- It takes a few seconds to transmit the Weekly Timer operation patterns to the indoor unit. Please continue to point the remote controller at the indoor unit until all data has been sent.
- When "Weekly Timer" is set, temperature can not be set 10°C.

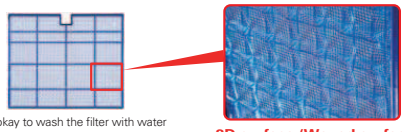
Low Standby Power

Electrical devices consume standby power even when they are not in actual use. While we obviously strive to reduce power consumption during actual use, reducing this wasted power that cannot be seen is also very important.



Nano Platinum Filter (MSZ-SF25/35/42/50,MSZ-GF60/71)

This filter incorporates nanometre-sized platinum-ceramic particles that generate stable antibacterial and deodourising effects. The size of the three-dimensional surface has been increased as well, enlarging the filter capture area. These features give the Nano Platinum Filter better dust collection performance than conventional filters. The superior air-cleaning effectiveness raises room comfort yet another level.

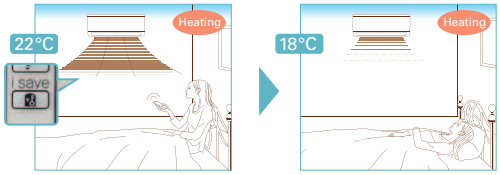


✻It is okay to wash the filter with water (air-cleaning effect is maintained)

3D surface (Waved surface)

"i save" Mode

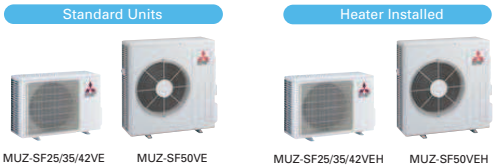
"i save" is a simplified setting function that recalls the preferred (preset) temperature by pressing a single button on the remote controller. Press the same button twice in repetition to immediately return to the previous temperature setting. Using this function contributes to comfortable, waste-free operation, realising the most suitable air conditioning settings and saving on power consumption when, for example, leaving the room or going to bed.



✻Temperature can be preset to 10°C when heating in the "i-save" mode (except when connected to MXZ-8B140VA/YA, MXZ-8B160VA/YA).

Outdoor Units for Cold Region (25/35/42/50)

Single split-type outdoor units are available in both standard and heater-equipped units. An electric heater is installed in each unit to prevent freezing in cold outdoor environments.



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MSZ-S SERIES

DC Inverter

Indoor Unit

MSZ-SF15/20VA

Outdoor Unit

For MXZ Connection Only

Remote Controller

Econo Cool | Pure White | AUTO VANE | SWING | AUTO | Weekly Timer | i save | ACO | Auto Restart | Optional | Group Control | Optional | M-NET connection | Optional | Wi-Fi Interface | MXZ connection | Flare connection | Self Diagnosis | Failure Recall

Type				Inverter Heat Pump					
Indoor Unit				MSZ-SF15VA	MSZ-SF20VA	MSZ-SF25VE	MSZ-SF25VE	MSZ-SF35VE	MSZ-SF35VE
Outdoor Unit				for MXZ connection		MUZ-SF25VE	MUZ-SF25VEH	MUZ-SF35VE	MUZ-SF35VEH
Refrigerant				R410A(*1)					
Power Supply	Source			Outdoor Power supply					
	Outdoor (V / Phase / Hz)			230/Single/50					
Cooling	Design load		kW	-	-	2.5	2.5	3.5	3.5
	Annual electricity consumption (*2)		kWh/a	-	-	116	116	171	171
	SEER (*4)			-	-	7.6	7.6	7.2	7.2
		Energy efficiency class		-	-	A+++	A+++	A+++	A+++
	Capacity	Rated	kW	-	-	2.5	2.5	3.5	3.5
		Min-Max	kW	-	-	0.9-3.4	0.9-3.4	1.1-3.8	1.1-3.8
	Total Input	Rated	kW	-	-	0.600	0.600	1.080	1.080
Heating (Average Season)(*5)	Design load		kW	-	-	2.4(-10°C)	2.4(-10°C)	2.9(-10°C)	2.9(-10°C)
	Declared Capacity	at reference design temperature	kW	-	-	2.4(-10°C)	2.4(-10°C)	2.9(-10°C)	2.9(-10°C)
		at bivalent temperature	kW	-	-	2.4(-10°C)	2.4(-10°C)	2.9(-10°C)	2.9(-10°C)
		at operation limit temperature	kW	-	-	2.0(-15°C)	1.6(-20°C)	2.2(-15°C)	1.6(-20°C)
	Back up heating capacity		kW	-	-	0.0(-10°C)	0.0(-10°C)	0.0(-10°C)	0.0(-10°C)
	Annual electricity consumption (*2)		kWh/a	-	-	764	790	923	948
	SCOP (*4)			-	-	4.4	4.3	4.4	4.3
		Energy efficiency class		-	-	A+	A+	A+	A+
	Capacity	Rated	kW	-	-	3.2	3.2	4.0	4.0
		Min-Max	kW	-	-	1.0-4.1	1.0-4.1	1.3-4.6	1.3-4.6
	Total Input	Rated	kW	-	-	0.780	0.780	1.030	1.030
Operating Current (Max)			A	-	-	8.4	8.4	8.5	8.5
Indoor Unit	Input	Rated	kW	0.017	0.019	0.024	0.024	0.027	0.027
	Operating Current(Max)		A	0.17	0.19	0.2	0.2	0.3	0.3
	Dimensions	H*W*D	mm	250-760-168	250-760-168	299-798-195	299-798-195	299-798-195	299-798-195
	Weight		kg	7.7	7.7	10	10	10	10
	Air Volume (SLo-Lo-Mid-Hi-SHi(*3)) (Dry/Wet))	Cooling	m³/min	3.5 - 3.9 - 4.6 - 5.5 - 6.4	3.5 - 3.9 - 4.6 - 5.5 - 6.9	3.5 - 4.1 - 5.6 - 7.2 - 9.1	3.5 - 4.1 - 5.6 - 7.2 - 9.1	3.5 - 4.1 - 5.6 - 7.2 - 9.1	3.5 - 4.1 - 5.6 - 7.2 - 9.1
		Heating	m³/min	3.7 - 4.4 - 5.0 - 6.0 - 6.8	3.7 - 4.4 - 5.0 - 6.0 - 7.3	3.5 - 4.1 - 6.7 - 8.2 - 10.3	3.5 - 4.1 - 6.7 - 8.2 - 10.3	3.5 - 4.1 - 6.7 - 8.3 - 11.0	3.5 - 4.1 - 6.7 - 8.3 - 11.0
	Sound Level (SPL) (SLo-Lo-Mid-Hi-SHi(*3))	Cooling	dB(A)	21 - 26 - 30 - 35 - 40	21 - 26 - 30 - 35 - 42	21 - 24 - 30 - 36 - 42	21 - 24 - 30 - 36 - 42	21 - 24 - 30 - 36 - 42	21 - 24 - 30 - 36 - 42
		Heating	dB(A)	21 - 26 - 30 - 35 - 40	21 - 26 - 30 - 35 - 42	21 - 24 - 34 - 39 - 45	21 - 24 - 34 - 39 - 45	21 - 24 - 34 - 40 - 46	21 - 24 - 34 - 40 - 46
	Sound Level (PWL)	Cooling	dB(A)	-	-	57	57	57	57
Outdoor Unit	Dimensions	H*W*D	mm	-	-	550-800-285	550-800-285	550-800-285	550-800-285
	Weight		kg	-	-	31	31	31	31
	Air Volume	Cooling	m³/min	-	-	31.1	31.1	35.9	35.9
		Heating	m³/min	-	-	30.7	30.7	35.9	35.9
	Sound Level (SPL)	Cooling	dB(A)	-	-	47	47	49	49
		Heating	dB(A)	-	-	48	48	50	50
	Sound Level (PWL)	Cooling	dB(A)	-	-	58	58	62	62
	Operating Current (Max)		A	-	-	8.2	8.2	8.2	8.2
	Breaker Size		A	-	-	10	10	10	10
Ext. Piping	Diameter	Liquid/Gas	mm	6.35/9.52	6.35/9.52	6.35 / 9.52	6.35 / 9.52	6.35 / 9.52	6.35 / 9.52
	Max.Length	Out-In	m	-	-	20	20	20	20
	Max.Height	Out-In	m	-	-	12	12	12	12
Guaranteed Operating Range (Outdoor)		Cooling	°C	-	-	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46
		Heating	°C	-	-	-15 ~ +24	-20 ~ +24	-15 ~ +24	-20 ~ +24

(*1) Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to 1975. This means that if 1 kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 1975 times higher than 1 kg of CO_2, over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional.
(*2) Energy consumption based on standard test results.Actual energy consumption will depend on how the appliance is used and where it is located.
(*3) SHi: Super High
(*4) SEER, SCOP and other related description are based on COMMISSION DELEGATED REGULATION (EU) No.626/2011. The temperature conditions for calculating SCOP are based on "Average Season".
(*5) Please see page 47 for heating (warmer season) specifications.

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MSZ-S SERIES
MSZ-G SERIES

Indoor Unit

MSZ-SF25/35/42/50VE

MSZ-GF60/71VE

Outdoor Unit

MUZ-SF25/35/42VE(H)

MUZ-SF50VE(H)
MUZ-GF60/71VE

Remote Controller

Type				Inverter Heat Pump					
Indoor Unit				MSZ-SF42VE	MSZ-SF42VE	MSZ-SF50VE	MSZ-SF50VE	MSZ-GF60VE	MSZ-GF71VE
Outdoor Unit				MUZ-SF42VE	MUZ-SF42VEH	MUZ-SF50VE	MUZ-SF50VEH	MUZ-GF60VE	MUZ-GF71VE
Refrigerant				R410A(*1)					
Power Supply	Source			Outdoor Power supply					
	Outdoor (V / Phase / Hz)			230/Single/50					
Cooling	Design load		kW	4.2	4.2	5	5	6.1	7.1
	Annual electricity consumption (*2)		kWh/a	196	196	246	246	311	364
	SEER (*4)			7.5	7.5	7.2	7.2	6.8	6.8
		Energy efficiency class		A++	A++	A++	A++	A++	A++
	Capacity	Rated	kW	4.2	4.2	5	5	6.1	7.1
		Min-Max	kW	0.8-4.5	0.8-4.5	1.4-5.4	1.4-5.4	1.4-7.5	2.0-8.7
	Total Input	Rated	kW	1.340	1.340	1.660	1.660	1.790	2.130
Heating (Average Season)(*5)	Design load		kW	3.8(-10°C)	3.8(-10°C)	4.2(-10°C)	4.2(-10°C)	4.6(-10°C)	6.7(-10°C)
	Declared Capacity	at reference design temperature	kW	3.8(-10°C)	3.8(-10°C)	4.2(-10°C)	4.2(-10°C)	4.6(-10°C)	6.7(-10°C)
		at bivalent temperature	kW	3.8(-10°C)	3.8(-10°C)	4.2(-10°C)	4.2(-10°C)	4.6(-10°C)	6.7(-10°C)
		at operation limit temperature	kW	3.4(-15°C)	2.2(-20°C)	3.4(-15°C)	2.3(-20°C)	3.7(-15°C)	5.4(-15°C)
	Back up heating capacity		kW	0.0(-10°C)	0.0(-10°C)	0.0(-10°C)	0.0(-10°C)	0.0(-10°C)	0.0(-10°C)
	Annual electricity consumption (*2)		kWh/a	1215	1242	1351	1380	1489	2204
	SCOP (*4)			4.4	4.3	4.4	4.3	4.3	4.2
		Energy efficiency class		A+	A+	A+	A+	A+	A+
	Capacity	Rated	kW	5.4	5.4	5.8	5.8	6.8	8.1
		Min-Max	kW	1.3-6.0	1.3-6.0	1.4-7.3	1.4-7.3	2.0-9.3	2.2-9.9
	Total Input	Rated	kW	1.580	1.58	1.7	1.7	1.81	2.23
Operating Current (Max)			A	9.5	9.5	12.3	12.3	14.5	16.6
Indoor Unit	Input	Rated	kW	0.027	0.027	0.035	0.035	0.062	0.058
	Operating Current(Max)		A	0.3	0.3	0.3	0.3	0.5	0.5
	Dimensions	H*W*D	mm	299-798-195	299-798-195	299-798-195	299-798-195	325-1100-238	325-1100-238
	Weight		kg	10	10	10	10	16	16
	Air Volume (SLo-Lo-Mid-Hi-SHi(*3)(Dry/Wet))	Cooling	m^3/min	5.0 - 5.8 - 6.7 - 7.9 - 9.1	5.0 - 5.8 - 6.7 - 7.9 - 9.1	5.6 - 6.2 - 7.0 - 8.2 - 9.9	5.6 - 6.2 - 7.0 - 8.2 - 9.9	9.8-11.3-13.4-15.6-18.3	9.7-11.5-13.3-15.4-17.8
		Heating	m^3/min	5.0 - 5.8 - 7.2 - 9.1 - 11.4	5.0 - 5.8 - 7.2 - 9.1 - 11.4	5.6 - 6.4 - 8.0 - 9.8 - 12.0	5.6 - 6.4 - 8.0 - 9.8 - 12.0	9.8-11.3-13.4-15.6-18.3	10.2-11.5-13.3-15.4-17.8
	Sound Level (SPL) (SLo-Lo-Mid-Hi-SHi(*3))	Cooling	dB(A)	28 - 31 - 34 - 38 - 42	28 - 31 - 34 - 38 - 42	30 - 33 - 36 - 40 - 45	30 - 33 - 36 - 40 - 45	29 - 37 -41 - 45 - 49	30 - 37 - 41 - 45 - 49
		Heating	dB(A)	28 - 31 - 36 - 42 - 47	28 - 31 - 36 - 42 - 47	30 - 33 - 38 - 43 - 49	30 - 33 - 38 - 43 - 49	29 - 37 - 41 - 45 - 49	30 - 37 - 41 - 45 - 49
	Sound Level (PWL)	Cooling	dB(A)	57	57	58	58	65	65
Outdoor Unit	Dimensions	H*W*D	mm	550-800-285	550-800-285	880-840-330	880-840-330	880-840-330	880-840-330
	Weight		kg	35	35	55	55	50	53
	Air Volume	Cooling	m^3/min	35.2	35.2	44.6	44.6	49.2	50.1
		Heating	m^3/min	33.6	33.6	44.6	44.6	49.2	48.2
	Sound Level (SPL)	Cooling	dB(A)	50	50	52	52	55	55
		Heating	dB(A)	51	51	52	52	55	55
	Sound Level (PWL)	Cooling	dB(A)	63	63	65	65	65	65
	Operating Current (Max)		A	9.2	9.2	12	12	14	16.1
	Breaker Size		A	10	10	16	16	20	20
Ext. Piping	Diameter	Liquid/Gas	mm	6.35 / 9.52	6.35 / 9.52	6.35 / 12.7	6.35 / 12.7	6.35/15.88	9.52/15.88
	Max.Length	Out-In	m	20	20	30	30	30	30
	Max.Height	Out-In	m	12	12	15	15	15	15
Guaranteed Operating Range (Outdoor)		Cooling	°C	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46	-10 ~ +46
		Heating	°C	-15 ~ +24	-20 ~ +24	-15 ~ +24	-20 ~ +24	-15 ~ +24	-15 ~ +24

(*1) Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to 1975. This means that if 1 kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 1975 times higher than 1 kg of CO_2, over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional.
(*2) Energy consumption based on standard test results.Actual energy consumption will depend on how the appliance is used and where it is located.
(*3) SHi: Super High
(*4) SEER, SCOP and other related description are based on COMMISSION DELEGATED REGULATION (EU) No.626/2011. The temperature conditions for calculating SCOP are based on "Average Season".
(*5) Please see page 47 for heating (warmer season) specifications.

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MSZ-H SERIES

Compact, high-performance indoor and outdoor units and advanced inverter technologies provide superior energy savings and comfort in all rooms.

MSZ-HJ25/35/50VA

Stylish Design with Flat Panel Front

A stylish flat panel design is employed for the front of the indoor unit. The simple look matches room aesthetics.

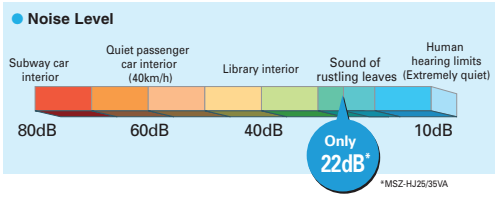
Advanced Inverter Control – Efficient Operation All the Time

DC Inverter | 25·35 SEER A | 25·35 SCOP A | 50 SEER A+ | 50 SCOP A+

Mitsubishi Electric's cutting-edge inverter technologies are adopted to provide automatic adjustment of operation load according to need. This reduces excessive consumption of electricity, and thereby realises an Energy Rank "A" rating for 25·35 classes and "A+" for 50 classes.

Silent Operation

Quiet, relaxing space is within reach. Operational noise is a low 22dB (25-35 classes). Operation is so silent you might even forget the air conditioner is on.



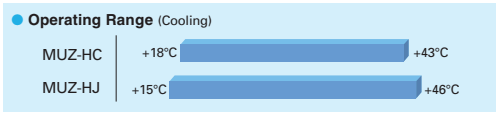
Long Piping Length

Compared to previous models, the piping length is significantly increased, further enhancing the ease and flexibility of installation.

	MSZ-HJ	MSZ-HC
Max piping length	20m	10m
Max piping height	12m	5m

Operating Range

As a result of an extended operating range when cooling, these models accommodate a wider range of usage environments and applications than previous models.



Compact Units

The widths of both indoor and outdoor units are compact, making installation in small, tight spaces possible.

Indoor Unit: MSZ-HJ25/35/50VA

Only 799mm wide

Outdoor Unit: MUZ-HJ25/35VA

Only 699mm wide

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MSZ-H SERIES

EUROVENT CERTIFIED PERFORMANCE

DC Inverter | Joint Lap | 50 DC Fan Motor | Grooved Piping | 50 SEER A+ | 50 SCOP A+

Indoor Unit

MSZ-HJ25/35/50VA

Outdoor Unit

MUZ-HJ25/35VA

MUZ-HJ50VA

Remote Controller

Econo Cool | Pure White | AUTO VANE | SWING | AUTO | Auto Restart | Cleaning-free pipe routed | Flare connection | Self Diagnosis | Failure Recall

Type				Inverter Heat Pump		
Indoor Unit				MSZ-HJ25VA	MSZ-HJ35VA	MSZ-HJ50VA
Outdoor Unit				MUZ-HJ25VA	MUZ-HJ35VA	MUZ-HJ50VA
Refrigerant				R410A(*1)		
Power Supply	Source			Indoor Power supply		
	Outdoor (V / Phase / Hz)			230V/Single/50Hz		
Cooling	Design load		kW	2.5	3.1	5.0
	Annual electricity consumption (*2)		kWh/a	171	212	292
	SEER (*4)			5.1	5.1	6.0
		Energy efficiency class		A	A	A+
	Capacity	Rated	kW	2.5	3.15	5.0
		Min-Max	kW	1.3 - 3.0	1.4 - 3.5	1.3 - 5.0
	Total Input	Rated	kW	0.730	1.040	2.050
Heating (Average Season)(*5)	Design load		kW	1.9(-10°C)	2.4(-10°C)	3.8(-10°C)
	Declared Capacity	at reference design temperature	kW	1.9(-10°C)	2.4(-10°C)	3.8(-10°C)
		at bivalent temperature	kW	1.9(-10°C)	2.4(-10°C)	3.8(-10°C)
		at operation limit temperature	kW	1.9(-10°C)	2.4(-10°C)	3.8(-10°C)
	Back up heating capacity		kW	0.0(-10°C)	0.0(-10°C)	0.0(-10°C)
	Annual electricity consumption (*2)		kWh/a	698	885	1267
	SCOP (*4)			3.8	3.8	4.2
		Energy efficiency class		A	A	A+
	Capacity	Rated	kW	3.15	3.6	5.4
		Min-Max	kW	0.9 - 3.5	1.1 - 4.1	1.4 - 6.5
	Total Input	Rated	kW	0.870	0.995	1.480
Operating Current (Max)			A	5.8	6.5	9.8
Indoor Unit	Input	Rated	kW	0.020	0.021	0.037
	Operating Current(Max)		A	0.3	0.3	0.4
	Dimensions	H*W*D	mm	290-799-232	290-799-232	290-799-232
	Weight		kg	9	9	9
	Air Volume (SLo-Lo-Mid-Hi-SHi(*3)(Dry/Wet))	Cooling	m^3/min	3.8 - 5.5 - 7.3 - 9.5	3.8 - 5.7 - 7.8 - 10.9	6.3 - 9.1 - 11.1 - 12.9
		Heating	m^3/min	3.5 - 5.5 - 7.5 - 10.0	3.5 - 5.5 - 7.5 - 10.3	6.1 - 8.3 - 11.1 - 14.3
	Sound Level (SPL) (SLo-Lo-Mid-Hi-SHi(*3))	Cooling	dB(A)	22 - 30 - 37 - 43	22 - 31 - 38 - 45	28 - 36 - 40 - 45
		Heating	dB(A)	23 - 30 - 37 - 43	23 - 30 - 37 - 44	27 - 34 - 41 - 47
	Sound Level (PWL)	Cooling	dB(A)	57	60	60
Outdoor Unit	Dimensions	H*W*D	mm	538-699-249	538-699-249	550-800-285
	Weight		kg	24	25	36
	Air Volume	Cooling	m^3/min	31.5	31.5	36.3
		Heating	m^3/min	31.5	31.5	34.8
	Sound Level (SPL)	Cooling	dB(A)	50	50	50
		Heating	dB(A)	50	50	51
	Sound Level (PWL)	Cooling	dB(A)	63	64	64
	Operating Current (Max)		A	5.5	6.2	9.4
	Breaker Size		A	10	10	12
Ext. Piping	Diameter	Liquid/Gas	mm	6.35/9.52	6.35/9.52	6.35/12.7
	Max.Length	Out-In	m	20	20	20
	Max.Height	Out-In	m	12	12	12
Guaranteed Operating Range (Outdoor)		Cooling	°C	+15 ~ +46	+15 ~ +46	+15 ~ +46
		Heating	°C	-10 ~ +24	-10 ~ +24	-10 ~ +24

(*1) Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to 1975. This means that if 1 kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 1975 times higher than 1 kg of CO_2, over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional.
(*2) Energy consumption based on standard test results.Actual energy consumption will depend on how the appliance is used and where it is located.
(*3) SHi: Super High
(*4) SEER, SCOP and other related description are based on COMMISSION DELEGATED REGULATION (EU) No.626/2011. The temperature conditions for calculating SCOP are based on "Average Season".
(*5) Please see page 47 for heating (warmer season) specifications.

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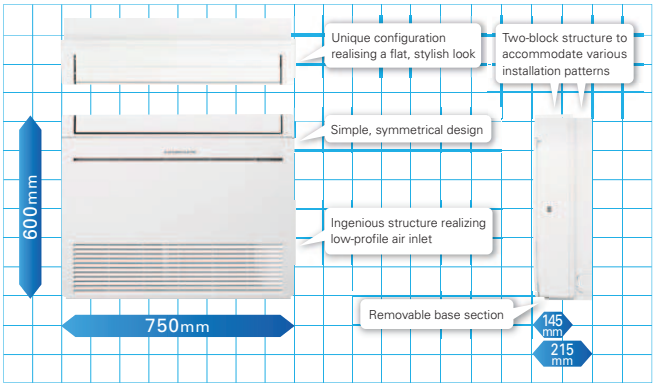
MFZ SERIES

High Capacity, Energy Savings and a Design in Harmony with Living Spaces
Raise the Value of Your Room to the Next Level.

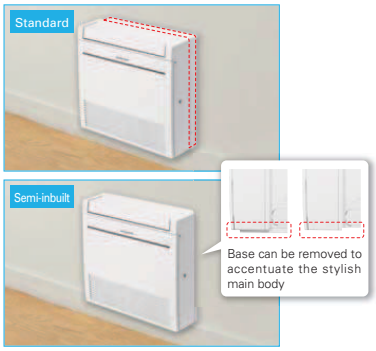
MFZ-KJ25/35/50VE

Simple , Flat Design

Uneven surfaces have been smoothed to provide a simple design with linear beauty, harmonised with all types of interiors.



Images of installed unit



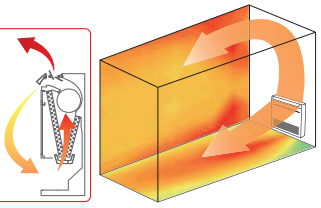
Multi-flow Vane

Three uniquely shaped vanes control the airflow and allow the freedom to customize comfort according to preferences.

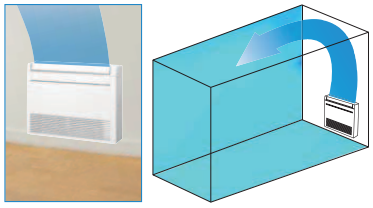
When heating

Rapid heating

Warm air is blown out in a downward direction and then sucked back into the unit to quickly raise the temperature of the air being blown out.



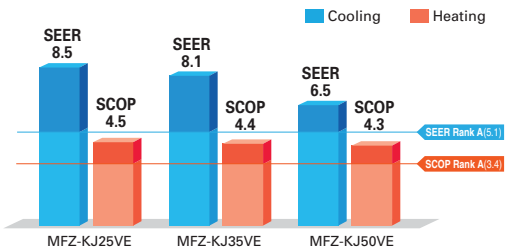
When cooling



* The downward airflow is also possible as well as heating.

Excellent Energy-saving Performance

SEER A+++ (25) and SCOP A+ (25/35/50) ratings have been achieved through development focusing on compliance with European energy-related product (ErP) regulations.



Weekly Timer
(Introduced in response to market demand)

Temperature settings and On/Off control can be managed over a period of one week using the Weekly Timer. Up to eight setting patterns per calendar day are possible.

Trouble-free Installation and Maintenance

Using the original installation plate that comes as standard equipment, installation of the unit is a snap. Levelling adjusters are provided, preventing damage to the wall. Generous pipe length (20–30 metres) is provided, so there is no need to worry about distance to the outdoor unit. All units are equipped with an automatic self-diagnostics function as well. Simply access the trouble log recall mode for instant troubleshooting.

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MFZ-KJ SERIES

Indoor Unit

MFZ-KJ25/35/50VE

Outdoor Unit

MUFZ-KJ25/35VE

MUFZ-KJ50VE

Remote Controller

Type				Inverter Heat Pump		
Indoor Unit				MFZ-KJ25VE	MFZ-KJ35VE	MFZ-KJ50VE
Outdoor Unit				MUFZ-KJ25VE	MUFZ-KJ35VE	MUFZ-KJ50VE
Refrigerant				R410A(*1)	R410A(*1)	R410A(*1)
Power Supply	Source			Outdoor power supply		
	Outdoor(V/Phase/Hz)			230 / Single / 50		
Cooling	Design load		kW	2.5	3.5	5.0
	Annual electricity consumption(*2)		kWh/a	102	150	266
	SEER(*4)			8.5	8.1	6.5
		Energy efficiency class		A+++	A++	A++
	Capacity	Rated	kW	2.5	3.5	5.0
		Min-Max	kW	0.5 - 3.4	0.5 - 3.7	1.6 - 5.7
	Total Input	Rated	kW	0.540	0.940	1.410
Heating (Average Season)	Design load		kW	3.4(-10℃)	3.5(-10℃)	4.4(-10℃)
	Declared Capacity	at reference design temperature	kW	3.4(-10℃)	3.5(-10℃)	4.4(-10℃)
		at bivalent temperature	kW	3.4(-10℃)	3.5(-10℃)	4.4(-10℃)
		at operation limit temperature	kW	2.4(-15℃)	2.9(-15℃)	6.0(-15℃)
	Back up heating capacity		kW	0.0(-10℃)	0.0(-10℃)	0.0(-10℃)
	Annual electricity consumption(*2)		kWh/a	1059	1110	1406
	SCOP(*4)			4.5	4.4	4.3
		Energy efficiency class		A+	A+	A+
	Capacity	Rated	kW	3.4	4.3	6.0
		Min-Max	kW	1.2 - 4.6	1.2 - 5.5	2.2 - 8.2
	Total Input	Rated	kW	0.770	1.100	1.610
Operating Current (Max)			A	9.4	9.4	14.0
Indoor Unit	Input	Rated	kW	0.016	0.016	0.038
	Operating Current(Max)		A	0.17	0.17	0.34
	Dimensions	H*W*D	mm	600-750-215	600-750-215	600-750-215
	Weight		kg	15	15	15
	Air Volume	Cooling	m3/min	3.9 - 4.9 - 5.9 - 7.1 - 8.2	3.9 - 4.9 - 5.9 - 7.1 - 8.2	5.6 - 6.7 - 8.0 - 9.3 - 10.6
	(SLo-Lo-Mid-Hi-SHi(*3))	Heating	m3/min	3.9 - 5.1 - 6.2 - 7.7 - 9.7	3.9 - 5.1 - 6.2 - 7.7 - 9.7	6.0 - 7.4 - 9.4 - 11.6 - 14.0
	Sound Level (SPL)	Cooling	dB(A)	20 - 25 - 30 - 35 - 39	20 - 25 - 30 - 35 - 39	27 - 31 - 35 - 39 - 44
	(SLo-Lo-Mid-Hi-SHi(*3))	Heating	dB(A)	19 - 25 - 30 - 35 - 41	19 - 25 - 30 - 35 - 41	29 - 35 - 40 - 45 - 50
	Sound Level (PWL)	Cooling	dB(A)	49	50	56
Outdoor Unit	Dimensions	H*W*D	mm	550-800-285	550-800-285	880-840-330
	Weight		kg	37	37	55
	Air Volume	Cooling	m3/min	31.3	31.3	45.8
		Heating	m3/min	33.6	33.6	45.8
	Sound Level (SPL)	Cooling	dB(A)	46	47	49
		Heating	dB(A)	51	51	51
	Sound Level (PWL)	Cooling	dB(A)	59	60	63
	Operating Current(Max)		A	9.2	9.2	13.6
	Breaker Size		A	10	10	16
Ext. Piping	Diameter	Liquid/Gas	mm	6.35/9.52	6.35/9.52	6.35/12.7
	Max.Length	Out-In	m	20	20	30
	Max.Height	Out-In	m	12	12	15
Guaranteed Operating Range [Outdoor]		Cooling	℃	-10 ~ +46	-10 ~ +46	-10 ~ +46
		Heating	℃	-15 ~ +24	-15 ~ +24	-15 ~ +24

(*1) Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to 1975. This means that if 1 kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 1975 times higher than 1 kg of CO_2, over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional.
(*2) Energy consumption based on standard test results. Actual energy consumption will depend on how the appliance is used and where it is located.
(*3) SHi: Super High
(*4) SEER, SCOP and other related description are based on COMMISSION DELEGATED REGULATION (EU) No.626/2011. The temperature conditions for calculating SCOP are based on "Average Season".

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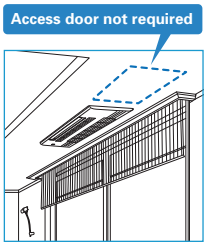
MLZ SERIES

Introducing a new type of ceiling cassette for the Multi-Split Series with streamed interior dimensions and a sharp, sleek appearance.

MLZ-KA25/35/50VA

Ceiling Mounted

Installing the ceiling-mounted MLZ Series unit in a room creates a more spacious feel that enhances room comfort. This overhead format is also an excellent solution when lighting equipment is installed at the centre of the room and fixtures such as book shelves are mounted on wall surfaces.



Slim Body

The new units are designed with a slim body (only 175mm high), ensuring easy installation even when low ceiling cavities limit installation space. The need for ceiling cavity service space is also eliminated, further reducing the dimensions required for installation.

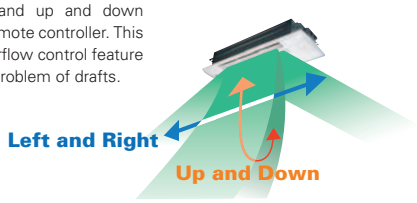
Set Airflow According to Ceiling Height

Dual-level airflow selection is engineered to accommodate specific ceiling heights. This is a key feature for adjusting airflow effectively when it is either too strong or too weak due to being mismatched with the height of the ceiling.

	25	35	50
Standard	2.4m	2.4m	2.4m
High ceiling	2.7m	2.7m	2.7m

Auto Vane Control

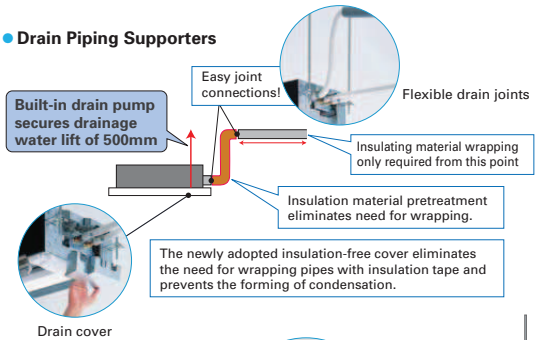
Outlet vanes can be moved left and right, and up and down using the remote controller. This improved airflow control feature solves the problem of drafts.



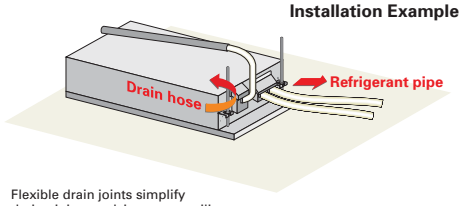
Easy Installation

A built-in drain pump (500mm lift) and flexible drain joints make attaching the drain hose in the ceiling cavity easy, resulting in simple and fast installation. Tight yet flexible fittings eliminate the need of wrapping with heat-insulation tape, and ensure that pipe and drain cover connections are free of condensation.

● Drain Piping Supporters


Easy joint connections!
Flexible drain joints
Built-in drain pump secures drainage water lift of 500mm
Insulating material wrapping only required from this point
Insulation material pretreatment eliminates need for wrapping.
The newly adopted insulation-free cover eliminates the need for wrapping pipes with insulation tape and prevents the forming of condensation.
Drain cover

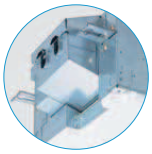
Installation Example

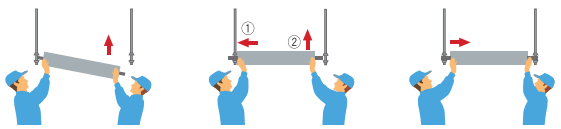


Flexible drain joints simplify drain piping work in narrow ceiling areas

● Easy Mounting Plate

Suspension work simplified with well-designed mounting plates





Secure one side

① Push the unit to the other side
② Secure the opposite side

Move unit to the centre

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MLZ-KA SERIES

DC Inverter

Indoor Unit

MLZ-KA25/35/50VA

Panel

MLP-440W

Outdoor Unit

For MXZ Connection Only

Remote Controller

Econo Cool | AUTO VANE | Anti-allergy Enzyme (Optional) | Catechin (Optional) | SWING | High Ceiling | AUTO | ACO | Auto Restart | Optional | Group Control (Optional) | M-NET connection (Optional) | MXZ connection | Drain Lift Up | Flare connection | Self Diagnosis | Failure Recall

Type				Inverter Heat Pump		
Indoor Unit				MLZ-KA25VA	MLZ-KA35VA	MLZ-KA50VA
Outdoor Unit				for MXZ connection		
Refrigerant				R410A(*1)		
Power Supply	Source			Outdoor Power supply		
	Outdoor (V / Phase / Hz)			230V / Single / 50Hz		
Cooling	Design load		kW	-	-	-
	Annual electricity consumption (*2)		kWh/a	-	-	-
	SEER (*4)			-	-	-
		Energy efficiency class		-	-	-
	Capacity	Rated	kW	-	-	-
		Min-Max	kW	-	-	-
	Total Input	Rated	kW	-	-	-
Heating (Average Season)	Design load		kW	-	-	-
	Declared Capacity	at reference design temperature	kW	-	-	-
		at bivalent temperature	kW	-	-	-
		at operation limit temperature	kW	-	-	-
	Back up heating capacity		kW	-	-	-
	Annual electricity consumption (*2)		kWh/a	-	-	-
	SCOP (*4)			-	-	-
		Energy efficiency class		-	-	-
	Capacity	Rated	kW	-	-	-
		Min-Max	kW	-	-	-
	Total Input	Rated	kW	-	-	-
Operating Current (Max)			A	0.4	0.4	0.4
Indoor Unit	Input	Rated	kW	0.040	0.040	0.040
	Operating Current(Max)		A	-	-	-
	Dimensions	H*W*D	mm	175-1102-360	175-1102-360	175-1102-360
	Weight		kg	15	15	15
	Air Volume (SLo-Lo-Mid-Hi-SHi(*3)(Dry/Wet))	Cooling	m^3/min	7.2-8.0-8.8	7.3-8.4-9.4	8.3-9.8-11.4
		Heating	m^3/min	7.0-8.2-9.2	7.7-8.8-9.9	8.8-10.3-11.8
	Sound Level (SPL) (SLo-Lo-Mid-Hi-SHi(*3))	Cooling	dB(A)	29-32-35	31-34-37	34-38-43
		Heating	dB(A)	28-32-36	31-35-38	34-39-43
	Sound Level (PWL)	Cooling	dB(A)	-	-	-
Panel	Dimensions	H*W*D	mm	34-1200-414	34-1200-414	34-1200-414
	Weight		kg	3.5	3.5	3.5
Outdoor Unit	Dimensions	H*W*D	mm	-	-	-
	Weight		kg	-	-	-
	Air Volume	Cooling	m^3/min	-	-	-
		Heating	m^3/min	-	-	-
	Sound Level (SPL)	Cooling	dB(A)	-	-	-
		Heating	dB(A)	-	-	-
	Sound Level (PWL)	Cooling	dB(A)	-	-	-
	Operating Current (Max)		A	-	-	-
	Breaker Size		A	-	-	-
Ext. Piping	Diameter	Liquid/Gas	mm	6.35/9.52	6.35/9.52	6.35/12.7
	Max.Length	Out-In	m	-	-	-
	Max.Height	Out-In	m	-	-	-
Guaranteed Operating Range (Outdoor)		Cooling	℃	-	-	-
		Heating	℃	-	-	-

(*1) Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to 1975. This means that if 1 kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 1975 times higher than 1 kg of CO_2, over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional.
(*2) Energy consumption based on standard test results.Actual energy consumption will depend on how the appliance is used and where it is located.
(*3) SHi: Super High
(*4) SEER, SCOP and other related description are based on COMMISSION DELEGATED REGULATION (EU) No.626/2011. The temperature conditions for calculating SCOP are based on "Average Season".

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Specification on Warmer Condition

Type				Inverter Heat Pump					
Indoor Unit				MSZ-FH25VE		MSZ-FH35VE		MSZ-FH50VE	
Outdoor Unit				MUZ-FH25VE	MUZ-FH25VEHZ	MUZ-FH35VE	MUZ-FH35VEHZ	MUZ-FH50VE	MUZ-FH50VEHZ
Refrigerant				R410A (*1)					
Cooling	Design load		kW	2.5	2.5	3.5	3.5	5.0	5.0
	Annual electricity consumption (*2)		kWh/a	96	96	138	138	244	244
	SEER			9.1	9.1	8.9	8.9	7.2	7.2
		Energy efficiency class		A^{+++}	A^{+++}	A^{+++}	A^{+++}	A^{++}	A^{++}
Heating (Warmer Season)	Design load		kW	1.7 (2°C)	1.8 (2°C)	2.0 (2°C)	2.2 (2°C)	2.5 (2°C)	3.3 (2°C)
	Declared Capacity	at reference design temperature	kW	1.7 (2°C)	1.8 (2°C)	2.0 (2°C)	2.2 (2°C)	2.5 (2°C)	3.3 (2°C)
		at bivalent temperature	kW	1.7 (2°C)	1.8 (2°C)	2.0 (2°C)	2.2 (2°C)	2.5 (2°C)	3.3 (2°C)
		at operation limit temperature	kW	2.5 (–15°C)	1.7 (–25°C)	3.2 (–15°C)	2.6 (–25°C)	5.2 (–15°C)	3.8 (–25°C)
	Back up heating capacity		kW	0.0 (2°C)	0.0 (2°C)	0.0 (2°C)	0.0 (2°C)	0.0 (2°C)	0.0 (2°C)
	Annual electricity consumption (*2)		kWh/a	376	397	429	471	614	787
	SCOP			6.3	6.3	6.5	4.8 / 6.5	5.7	5.9
		Energy efficiency class		A^{+++}	A^{+++}	A^{+++}	A^{+++}	A^{+++}	A^{+++}

Type				Inverter Heat Pump					
Indoor Unit				MSZ-EF25VE2		MSZ-EF35VE2		MSZ-EF42VE2	MSZ-EF50VE2
Outdoor Unit				MUZ-EF25VE	MUZ-EF25VEH	MUZ-EF35VE	MUZ-EF35VEH	MUZ-EF42VE	MUZ-EF50VE
Refrigerant				R410A (*1)					
Cooling	Design load		kW	2.5	2.5	3.5	3.5	4.2	5.0
	Annual electricity consumption (*2)		kWh/a	103	103	144	144	192	244
	SEER			8.5	8.5	8.5	8.5	7.7	7.2
		Energy efficiency class		A^{+++}	A^{+++}	A^{+++}	A^{+++}	A^{++}	A^{++}
Heating (Warmer Season)	Design load		kW	1.3 (2°C)	1.3 (2°C)	1.6 (2°C)	1.6 (2°C)	2.1 (2°C)	2.3 (2°C)
	Declared Capacity	at reference design temperature	kW	1.3 (2°C)	1.3 (2°C)	1.6 (2°C)	1.6 (2°C)	2.1 (2°C)	2.3 (2°C)
		at bivalent temperature	kW	1.3 (2°C)	1.3 (2°C)	1.6 (2°C)	1.6 (2°C)	2.1 (2°C)	2.3 (2°C)
		at operation limit temperature	kW	2.0 (–15°C)	1.6 (–20°C)	2.4 (–15°C)	1.7 (–20°C)	3.4 (–15°C)	3.5 (–15°C)
	Back up heating capacity		kW	0.0 (2°C)	0.0 (2°C)	0.0 (2°C)	0.0 (2°C)	0.0 (2°C)	0.0 (2°C)
	Annual electricity consumption (*2)		kWh/a	304	304	396	396	491	557
	SCOP			6.0	6.0	5.7	5.7	6.0	5.8
		Energy efficiency class		A^{+++}	A^{+++}	A^{+++}	A^{+++}	A^{+++}	A^{+++}

Type				Inverter Heat Pump							
Indoor Unit				MSZ-SF25VE		MSZ-SF35VE		MSZ-SF42VE		MSZ-SF50VE	
Outdoor Unit				MUZ-SF25VE	MUZ-SF25VEH	MUZ-SF35VE	MUZ-SF35VEH	MUZ-SF42VE	MUZ-SF42VEH	MUZ-SF50VE	MUZ-SF50VEH
Refrigerant				R410A (*1)							
Cooling	Design load		kW	2.5	2.5	3.5	3.5	4.2	4.2	5.0	5.0
	Annual electricity consumption (*2)		kWh/a	116	116	171	171	196	196	246	246
	SEER			7.6	7.6	7.2	7.2	7.5	7.5	7.2	7.2
		Energy efficiency class		A^{++}	A^{++}	A^{++}	A^{++}	A^{++}	A^{++}	A^{++}	A^{++}
Heating (Warmer Season)	Design load		kW	1.3 (2°C)	1.3 (2°C)	1.6 (2°C)	1.6 (2°C)	2.1 (2°C)	2.1 (2°C)	2.3 (2°C)	2.3 (2°C)
	Declared Capacity	at reference design temperature	kW	1.3 (2°C)	1.3 (2°C)	1.6 (2°C)	1.6 (2°C)	2.1 (2°C)	2.1 (2°C)	2.3 (2°C)	2.3 (2°C)
		at bivalent temperature	kW	1.3 (2°C)	1.3 (2°C)	1.6 (2°C)	1.6 (2°C)	2.1 (2°C)	2.1 (2°C)	2.3 (2°C)	2.3 (2°C)
		at operation limit temperature	kW	2.0 (–15°C)	1.6 (–20°C)	2.2 (–15°C)	1.6 (–20°C)	3.4 (–15°C)	2.2 (–20°C)	3.4 (–15°C)	2.3 (–20°C)
	Back up heating capacity		kW	0.0 (2°C)	0.0 (2°C)	0.0 (2°C)	0.0 (2°C)	0.0 (2°C)	0.0 (2°C)	0.0 (2°C)	0.0 (2°C)
	Annual electricity consumption (*2)		kWh/a	337	337	923 / 418	417	507	507	563	563
	SCOP			5.4	5.4	5.4	5.4	5.8	5.8	5.7	5.7
		Energy efficiency class		A^{+++}	A^{+++}	A^{+++}	A^{+++}	A^{+++}	A^{+++}	A^{+++}	A^{+++}

Type				Inverter Heat Pump	
Indoor Unit				MSZ-GF60VE	MSZ-GF71VE
Outdoor Unit				MUZ-GF60VE	MUZ-GF71VE
Refrigerant				R410A (*1)	
Cooling	Design load		kW	6.1	7.1
	Annual electricity consumption (*2)		kWh/a	311	364
	SEER			6.8	6.8
		Energy efficiency class		A^{++}	A^{++}
Heating (Warmer Season)	Design load		kW	2.5 (2°C)	3.7 (2°C)
	Declared Capacity	At reference design temperature	kW	2.5 (2°C)	3.7 (2°C)
		at bivalent temperature	kW	2.5 (2°C)	3.7 (2°C)
		at operation limit temperature	kW	3.7 (–15°C)	5.4 (–15°C)
	Back up heating capacity		kW	0.0 (2°C)	0.0 (2°C)
	Annual electricity consumption (*2)		kWh/a	664	963
	SCOP (*4)			5.3	5.4
		Energy efficiency class		A^{+++}	A^{+++}

Type				Inverter Heat Pump		
Indoor Unit				MSZ-HJ25VA	MSZ-HJ35VA	MSZ-HJ50VA
Outdoor Unit				MUZ-HJ25VA	MUZ-HJ35VA	MUZ-HJ50VA
Refrigerant				R410A (*1)		
Cooling	Design load		kW	2.5	3.1	5.0
	Annual electricity consumption (*2)		kWh/a	171	212	292
	SEER			5.1	5.1	6.0
		Energy efficiency class		A	A	A^{+}
Heating (Warmer Season)	Design load		kW	1.1 (2°C)	1.3 (2°C)	2.1 (2°C)
	Declared Capacity	at reference design temperature	kW	1.1 (2°C)	1.3 (2°C)	2.1 (2°C)
		at bivalent temperature	kW	1.1 (2°C)	1.3 (2°C)	2.1 (2°C)
		at operation limit temperature	kW	1.9 (–10°C)	2.4 (–10°C)	3.8 (–10°C)
	Back up heating capacity		kW	0.0 (2°C)	0.0 (2°C)	0.0 (2°C)
	Annual electricity consumption (*2)		kWh/a	356	426	539
	SCOP			4.3	4.3	5.5
		Energy efficiency class		A^{+}	A^{+}	A^{+++}

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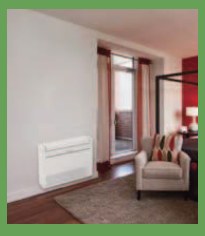
MXZ SERIES



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SELECTION

Choose from five types of indoor units and fourteen outdoor units that can run up to eight indoor units each.
Create the system that best matches room shapes and number of rooms.

STEP 1 SELECT INDOOR UNITS

Select the indoor unit to be installed in each room.

Wall-mounted

MSZ-FH

MSZ-EF

MSZ-SF (15・20)

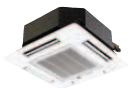
MSZ-SF (25-50)

MSZ-GF

Floor-standing

MFZ-KJ

Cassette


SLZ

MLZ

PLA

Ceiling-suspended

PCA

Ceiling-concealed

SEZ

PEAD

STEP 2 SELECT OUTDOOR UNITS

Select the best outdoor unit based on the number of indoor units and overall system capacity required.

2-port Connect up to 2 indoor units

MXZ-2D33VA
MXZ-2D42VA
MXZ-2D53VA(H)

3-port Connect up to 3 indoor units

MXZ-3D54VA2
MXZ-3D68VA

4-port Connect up to 4 indoor units

MXZ-4D72VA
MXZ-4D83VA

5-port Connect up to 5 indoor units

MXZ-5D102VA

6-port Connect up to 6 indoor units

MXZ-6C122VA

8-port Connect up to 8 indoor units

Outdoor Unit

MXZ-8B140V(Y)A
MXZ-8B160V(Y)A

Branch Box

PAC-AK32BC

PAC-AK53BC

Connection to indoor units requires an appropriate branch box (distribution piping is required when connecting two branch boxes).

STEP 3 CHECK SYSTEM COMPATIBILITY

Possible combinations depends on the outdoor unit chosen. Please check the following points.

Check Indoor Units

Refer to the "Indoor Unit Compatibility Table" to check if the indoor units selected can be used with the outdoor unit selected. (Indoor units not listed in the table cannot be used.)

Check Indoor Unit Capacity Combination

Refer to the "Combination Table" to check if the capacity combination of the indoor unit selected is connectable. (Combinations not listed cannot be connected.)

If the desired combination cannot be found, please change either the indoor or outdoor unit to match one of the combinations shown in the tables.

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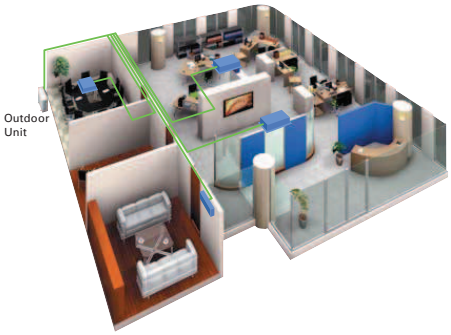
MXZ SERIES

Advancements in the MXZ Series include efficiency and flexibility in system expansion capabilities. The best solution when requiring multi-system air conditioning needs.



8-port

MXZ-8B140VA Single Phase
MXZ-8B140YA Three Phase
MXZ-8B160VA Single Phase
MXZ-8B160YA Three Phase

6-port

MXZ-6C122VA

4-port 5-port

MXZ-4D83VA
MXZ-5D102VA

3-port 4-port

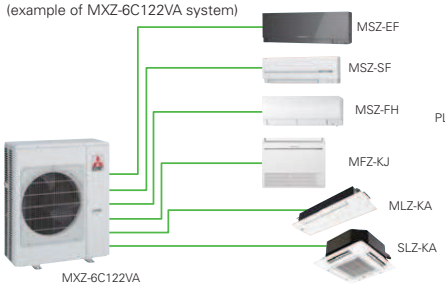
MXZ-3D54VA2
MXZ-3D68VA
MXZ-4D72VA

2-port

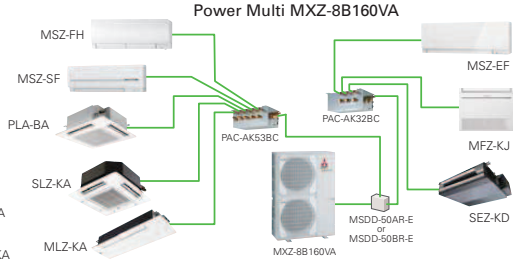
MXZ-2D33VA
MXZ-2D42VA
MXZ-2D53VA(H)

EXAMPLE SYSTEM

Smaller MXZ 2, 3, 4, 5 and 6 ports
(example of MXZ-6C122VA system)



Power Multi MXZ-8B160VA



Handle Up to 8 Rooms with a Single Outdoor Unit

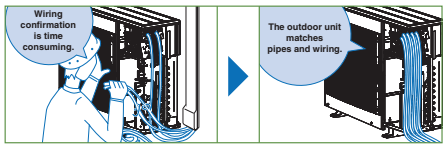
The MXZ Series offers a fourteen-system line-up to choose from, ranging between 3.3 and 15.5kW. All of them are compatible with specific M, S and P series indoor units. A single outdoor unit can handle a wide range of building layouts.

Support Functions

Wiring/Piping Correction Function* (3D54/3D68/4D72/4D83/5D102/6C122)

Simply press a single button to confirm if wiring and piping are properly connected. Wiring errors are corrected automatically when discovered. This eliminates the need to confirm complicated wiring connections when expanding the system. (For details, refer to the outdoor unit installation manual.)

* Function cannot be used when the outdoor temperature is below 0°C. The correction process requires 10–20 minutes to complete and must be conducted with the unit set to the "Cooling" mode.



Automatic Line Correcting
(MXZ-2D33VA/2D42VA/2D53VA(H)/3D54VA2)

Improper wiring or piping can be automatically detected when one indoor unit is operated in COOL mode for 30 minutes. When improper wiring or piping is detected, wiring lines are corrected (A to B/B to A) with the software.

* This function may not work due to the condition or environment of the unit, such as the following:
  - gas leak, closed stop valve
  - unit failure such as defective LEV
  - indoor/outdoor temperature
* This function does not work when the "2" of SW2 on the outdoor display P.C. board is turned OFF.

Ampere Limit Adjustment
(4D83/5D102/6C122/8B140/8B160)

Dipswitch settings can be used to adjust the maximum electrical current for operation. This function is highly recommended for managing energy costs. (For details, refer to the outdoor unit installation manual.)

* Maximum capacity is lowered with the use of this function.

Operation Lock

To accommodate specific use applications, cooling or heating operation can be specified when setting the control board of the outdoor unit. A convenient option when a system needs to be configured for exclusive cooling or heating service. (For details, refer to the outdoor unit installation manual.)

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MXZ SERIES

INVERTER MULTI

EUROVENT CERTIFIED PERFORMANCE

DC Inverter

Type (Inverter Multi - Split Heat Pump)				Up to 2 Indoor Units				Up to 3 Indoor Units		Up to 4 Indoor Units		Up to 5 Indoor Units
Indoor Unit				Please refer to (*5)								
Outdoor Unit				MXZ-2D33VA	MXZ-2D42VA	MXZ-2D53VA	MXZ-2D53VAH	MSZ-3D54VA2	MXZ-3D68VA	MXZ-4D72VA	MXZ-4D83VA	MXZ-5D102VA
Refrigerant				R410A*1								
Power Supply	Source			Outdoor power supply								
	Outdoor (V/Phase/Hz)			230 / Single / 50								
Cooling	Capacity	Rated	kW	3.3	4.2	5.3	5.3	5.4	6.8	7.2	8.3	10.2
	Input (Indoor+Outdoor)	Rated	kW	0.90		1.54	1.54		2.19	2.25	2.83	3.91
	Design Load		kW	3.3	4.2	5.3	5.3	5.4	6.8	7.2	8.3	10.2
	Annual Electricity Consumption*2		kWh/a	211		262	262		425	443	560	678
	SEER*5			5.5		7.1	7.1		5.6	5.7	5.2	5.3
		Energy Efficiency Class*5		A		A++	A++		A+	A+	A	A
Heating (Average Season)	Capacity	Rated	kW	4.0	4.5	6.4	6.4	7.0	8.6	8.6	9.0	10.5
	Input (Indoor+Outdoor)	Rated	kW	0.96		1.70	1.70		2.38	2.28	2.42	2.90
	Design Load		kW	2.7		4.5	4.5		6.8	7.0	7.1	8.6
	Declared Capacity	at reference design temperature	kW	2.1		3.7	3.6		5.4	5.6	5.6	6.9
		at bivalent temperature	kW	2.4		4.0	4.0		6.0	6.2	6.2	7.6
		at operation limit temperature	kW	1.7		3.3	3.0		4.4	4.7	4.7	5.6
	Back Up Heating Capacity		kW	0.6		0.8	0.9		1.4	1.4	1.5	1.7
	Annual Electricity Consumption*2		kWh/a	926		1507	1546		2466	2516	2536	3184
	SCOP*5			4.1		4.2	4.1		3.9	3.9	3.9	3.8
		Energy Efficiency Class*5		A+		A+	A+		A	A	A	A
Max. Operating Current (Indoor+Outdoor)			A	10.0		12.2	12.2		18.0	18.0	20.4	21.4
Outdoor Unit	Dimensions	H × W × D	mm	550 - 800(+69) - 285(+59.5)				710 - 840(+30) - 330(+66)			915 - 900 - 320(+67)	
	Weight		kg	32	37	37	38	57	57	58	69	70
	Air Volume	Cooling	m^3/min	32.9		32.9	32.9		42.1	42.1	42.1	56.6
		Heating	m^3/min	33.7		33.3	33.3		43.0	43.0	43.8	59.3
	Sound Level (SPL)	Cooling	dB(A)	49		50	50		50	50	49	53
		Heating	dB(A)	50		53	53		53	53	50	55
	Sound Level (PWL)	Cooling	dB(A)	63		64	64		64	64	64	68
	Breaker Size		A	10	15	15	15	25	25	25	25	25
Ext. Piping	Diameter	Liquid	mm	6.35 × 2	6.35 × 2	6.35 × 2	6.35 × 2	6.35 × 3	6.35 × 3	6.35 × 4	6.35 × 4	6.35 × 5
		Gas	mm	9.52 × 2	9.52 × 2	9.52 × 2	9.52 × 2	9.52 × 3	9.52 × 3	12.7×1+9.52×3	12.7×1+9.52×3	12.7×1+9.52×4
	Total Piping Length (max)		m	20	30	30	30	50	60	60	70	80
	Each Indoor Unit Piping Length (max)		m	15	20	20	20	25	25	25	25	25
	Max. Height		m	10	15(10)*3	15(10)*3	15(10)*3	15(10)*3	15(10)*3	15(10) *3	15(10) *3	15(10)*3
	Chargeless Length		m	20	20	20	20	40	40	40	40	40
Guaranteed Operating Range [Outdoor]		Cooling	℃	–10 ~ +46	–10 ~ +46	–10 ~ +46	–10 ~ +46	–10 ~ +46	–10 ~ +46	–10 ~ +46	–10 ~ +46	–10 ~ +46
		Heating	℃	–15 ~ +24	–15 ~ +24	–15 ~ +24	–20 ~ +24	–15 ~ +24	–15 ~ +24	–15 ~ +24	–15 ~ +24	–15 ~ +24

Type (Inverter Multi - Split Heat Pump)				Up to 6 Indoor Units	Up to 8 Indoor Units			
Indoor Unit				Please refer to (*6)				
Outdoor Unit				MXZ-6C122VA	MXZ-8B140VA	MXZ-8B140YA	MXZ-8B160VA	MXZ-8B160YA
Refrigerant				R410A*1				
Power Supply	Source			Outdoor power supply				
	Outdoor (V/Phase/Hz)			VA:230 / Single / 50, YA:400 / Three / 50				
Cooling	Capacity	Rated	kW	12.2	14.0	14.0	15.5	15.5
		Min - Max	kW	3.5 - 13.5	–	–	–	–
	Input*7	Rated	kW	4.05	3.86	3.86	4.71	4.71
	EER*6			3.01	3.52	3.52	3.21	3.21
		EEL Rank		B	–	–	–	–
Heating	Capacity	Rated	kW	14.0	16.0	16.0	18.0	18.0
		Min - Max	kW	3.5 - 16.5	–	–	–	–
	Input*7	Rated	kW	3.81	3.87	3.87	4.77	4.77
	COP*6			3.67	3.91	3.91	3.61	3.61
		EEL Rank		A	–	–	–	–
Operating Current (max)*7			A	30.0	29.5	13.0	29.5	13.0
Total Capacity of All Indoor Units (max)			kW	Please refer to combination table	18.5	18.5	20.2	20.2
Outdoor Unit	Dimensions	H × W × D	mm	1070-900-320 (+67)	1350-950-330			
	Weight		kg	87	129	139	129	139
	Air Volume	Cooling	m^3/min	59.5	100.0	100.0	106.0	106.0
		Heating	m^3/min	69.9	100.0	100.0	106.0	106.0
	Sound Level (SPL)	Cooling	dB(A)	55	50 - 47	50 - 47	51 - 48	51 - 48
		Heating	dB(A)	57	52	52	54	54
	Sound Level (PWL)	Cooling	dB(A)	69	–	–	–	–
	Breaker Size		A	32	40	25	40	25
Ext. Piping	Diameter	Liquid	mm	6.35×6	9.52×1	9.52×1	9.52×1	9.52×1
		Gas	mm	12.7×1+9.52×5	15.88×1	15.88×1	15.88×1	15.88×1
	Total Piping Length (max)		m	80	115	115	115	115
	Each Indoor Unit Piping Length (max)		m	25	15	15	15	15
	Max. Height		m	15 (10)*3	20 (30)*4	20 (30)*4	20 (30)*4	20 (30)*4
	Chargeless Length		m	60	40	40	40	40
Guaranteed Operating Range [Outdoor]		Cooling	℃	–10 ~ +46	–5 ~ +46	–5 ~ +46	–5 ~ +46	–5 ~ +46
		Heating	℃	–15 ~ +24	–15 ~ +21	–15 ~ +21	–15 ~ +21	–15 ~ +21

Type				Branch Box	
Model Name				PAC-AK53BC*8	PAC-AK32BC
Connectable Number of Indoor Units				Max. 5	Max. 3
Power Supply	Source			Outdoor power supply	
	Outdoor [V/Phase/Hz]			VA:230/Single/50, YA:400/Three/50	
Total Input			kW	0.003	
Operating Current			A	0.05	
Drain Hose Size*7			mm	O.D. 20 (VP-16)	
Dimensions [HxWxD]			mm	198 - 450 - 280	
Weight			kg	9.3	8.1
Piping [diameter]	Branch [Indoor side]	Liquid	mm	6.35 × 5	6.35 × 3
		Gas	mm	9.52×4, 12.7×1	9.52 × 3
	Main [Outdoor side]	Liquid	mm	9.52	
		Gas	mm	15.88	
	Connection Method			Flared	
Wiring	to Indoor Unit			3-wire + Earth wire	
	to Outdoor Unit			3-wire + Earth wire	

*1 Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to 1975. This means that if 1kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 1975 times higher than 1kg of CO_2, over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional.

*2 Energy consumption based on standard test results. Actual energy consumption will depend on how the appliance is used and where it is located.

*3 If the outdoor unit is installed higher than the indoor unit, max. height is reduced to 10m.

*4 If the outdoor unit is installed higher than the indoor unit, max. height is increased to 30m.

*5 EER/COP, EEL rank, SEER/SCOP values and energy efficiency class are measured when connected to the indoor units listed below.
MXZ-2D33VA → MSZ-SF15VA + MSZ-EF18VE
MXZ-2D42VA → MSZ-EF18VE + MSZ-EF25VE
MXZ-2D53VA → MSZ-EF18VE + MSZ-EF35VE
MXZ-3D54VA2 → MSZ-EF18VE + MSZ-EF18VE + MSZ-EF18VE
MXZ-3D68VA → MSZ-EF18VE + MSZ-EF25VE + MSZ-EF25VE
MXZ-4D72VA → MSZ-EF18VE + MSZ-EF18VE + MSZ-EF18VE + MSZ-EF18VE
MXZ-4D83VA → MSZ-EF18VE + MSZ-EF18VE + MSZ-EF22VE + MSZ-EF25VE
MXZ-5D102VA → MSZ-EF18VE + MSZ-EF18VE + MSZ-EF22VE + MSZ-EF22VE + MSZ-EF22VE

*6 EER/COP, EEL rank, values and energy efficiency class are measured when connected to the indoor units listed below.
MXZ-6C122VA → MSZ-EF25VA × 6
MXZ-8B140VA → MSZ-EF22VE × 8
MXZ-8B140YA → MSZ-EF22VE × 8
MXZ-8B160VA → MSZ-EF25VE × 8
MXZ-8B160YA → MSZ-EF25VE × 8

*7 Drain hose is to be locally purchased.

*8 When using PAC-AK53BC and PAC-AK52YP-E, PLA-RP100BA and PEAD-RP100JA(L)Q can be connected to MXZ-8B140V(Y)/160V(Y)A.

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Indoor Unit Compatibility Table

Possible combinations of outdoor units and indoor units are shown below.

Indoor Unit		Outdoor Unit / Inverter Models Heat pump type	MXZ- *5 2D33VA	MXZ- *5 2D42VA	MXZ- *5 2D53VA/H	MXZ- *5 3D54VA2	MXZ- *5 3D68VA	MXZ- *5 4D72VA	MXZ- *5 4D83VA	MXZ- *5 5D102VA	MXZ- 6C122VA	MXZ- *6 8B140VA	MXZ- *6 8B140YA	MXZ- *6 8B160VA	MXZ- *6 8B160YA
M series	Wall-Mounted	MSZ-FH25VE	●	●	●	●	●	●	●	●	●	●	●	●	●
		MSZ-FH35VE		●	●	●	●	●	●	●	●	●	●	●	●
		MSZ-FH50VE				●	●	●	●	●	●	●	●	●	●
		MSZ-SF15VA	●	●	●	●	●	●	●	●	●	●	●	●	●
		MSZ-SF20VA	●	●	●	●	●	●	●	●	●	●	●	●	●
		MSZ-SF25VE	●	●	●	●	●	●	●	●	●	●	●	●	●
		MSZ-SF35VE		●	●	●	●	●	●	●	●	●	●	●	●
		MSZ-SF42VE			●	●	●	●	●	●	●	●	●	●	●
		MSZ-SF50VE			●	●	●	●	●	●	●	●	●	●	●
		MSZ-GF60VE					●*3	●*3	●*3	●*3	●*3	●*3	●*3	●*3	●*3
		MSZ-GF71VE							●*3	●*3	●*3	●*3	●*3	●*3	●*3
		MSZ-EF18VE2W/B/S	●	●	●	●	●	●	●	●	●	●	●	●	●
		MSZ-EF22VE2W/B/S	●	●	●	●	●	●	●	●	●	●	●	●	●
		MSZ-EF25VE2W/B/S	●	●	●	●	●	●	●	●	●	●	●	●	●
		MSZ-EF35VE2W/B/S		●	●	●	●	●	●	●	●	●	●	●	●
		MSZ-EF42VE2W/B/S			●	●	●	●	●	●	●	●	●	●	●
		MSZ-EF50VE2W/B/S			●	●	●	●	●	●	●	●	●	●	●
	Floor-Standing	MFZ-KJ25VE *7	●	●	●	●	●	●	●	●	●	●	●	●	●
		MFZ-KJ35VE *7		●	●	●	●	●	●	●	●	●	●	●	●
		MFZ-KJ50VE				●	●	●	●	●	●	●	●	●	●
	1-way Cassette	MLZ-KA25VA	●	●	●	●	●	●	●	●	●	●	●	●	●
		MLZ-KA35VA		●	●	●	●	●	●	●	●	●	●	●	●
		MLZ-KA50VA				●	●	●	●	●	●	●	●	●	●
S series	4-way Cassette	SLZ-KA25VAQ2	●	●	●	●	●	●	●	●	●	●	●	●	●
		SLZ-KA25VAL2	●	●	●	●	●	●	●	●	●	●	●	●	●
		SLZ-KA35VAQ		●	●	●	●	●	●	●	●	●	●	●	●
		SLZ-KA35VAL		●	●	●	●	●	●	●	●	●	●	●	●
		SLZ-KA50VAQ				●	●	●	●	●	●	●	●	●	●
		SLZ-KA50VAL				●	●	●	●	●	●	●	●	●	●
	Ceiling-Concealed	SEZ-KD25VAQ *4	●	●	●	●	●	●	●	●	●	●	●	●	●
		SEZ-KD25VAL *4	●	●	●	●	●	●	●	●	●	●	●	●	●
		SEZ-KD35VAQ		●	●	●	●	●	●	●	●	●	●	●	●
		SEZ-KD35VAL		●	●	●	●	●	●	●	●	●	●	●	●
		SEZ-KD50VAQ				●	●	●	●	●	●	●	●	●	●
		SEZ-KD50VAL				●	●	●	●	●	●	●	●	●	●
		SEZ-KD60VAQ					●	●	●	●	●	●	●	●	●
		SEZ-KD60VAL					●	●	●	●	●	●	●	●	●
		SEZ-KD71VAQ							●	●	●	●	●	●	●
		SEZ-KD71VAL							●	●	●	●	●	●	●
P series	4-way Cassette	PLA-RP35BA										●	●	●	●
		PLA-RP50BA				●	●	●	●	●	●	●	●	●	●
		PLA-RP60BA					●	●	●	●	●	●	●	●	●
		PLA-RP71BA							●	●	●	●	●	●	●
		PLA-RP100BA										●	●	●	●
	Ceiling-Suspended	PCA-RP50KAQ				●	●	●	●	●	●				
		PCA-RP60KAQ					●	●	●	●	●				
		PCA-RP71KAQ							●	●	●				
	Ceiling-Concealed	PEAD-RP50JAQ				●*1	●*1	●*1	●*1	●*1	●*1	●*2	●*2	●*2	●*2
		PEAD-RP50JALQ				●*1	●*1	●*1	●*1	●*1	●*1	●*2	●*2	●*2	●*2
		PEAD-RP60JAQ							●*1	●*1	●*1	●*2	●*2	●*2	●*2
		PEAD-RP60JALQ							●*1	●*1	●*1	●*2	●*2	●*2	●*2
		PEAD-RP71JAQ							●*1	●*1	●*1	●*2	●*2	●*2	●*2
		PEAD-RP71JALQ							●*1	●*1	●*1	●*2	●*2	●*2	●*2
		PEAD-RP100JAQ										●*2	●*2	●*2	●*2
		PEAD-RP100JALQ										●*2	●*2	●*2	●*2

*1 Maximum total current of indoor units: 3A or less.
*2 Total indoor unit capacity should be 100% or less.
*3 The combination is still under evaluation.
*4 SEZ-KD25 cannot be connected with MXZ-2D/3D/4D/5D when total capacity of connected indoor units is equivalent to outdoor capacity (capacity ratio is 1).
*5 MXZ outdoor units are not designed to operate with a single indoor unit with one-to-one piping work. Please install at least two indoor units.
*6 Branch box PAC-AK53BC and PAC-AK32BC require connection of at least two indoor units connection.
*7 MFZ-KJ25/35VE "-E1" can not be connected with MXZ.

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Conditions for specifications

Temperature conditions are based on JIS B8616.

Cooling	Indoor	27˚C DB, 19˚C WB
	Outdoor	35˚C DB, 24˚C WB
Heating	Indoor	20˚C DB
	Outdoor	7˚C DB, 6˚C WB

Refrigerant piping length ; 5m
The figures for total input are based on the following voltages.

Series	Indoor unit	Outdoor unit
M Series S Series P Series (except for PEA) MXZ Series POWERFUL HEATING Series	–	VE,VA,VHA,VKA:230V/Single phase/50Hz YA,YHA,YKA:400V/Three phase/50Hz
PEA Series	400V/Three phase/50Hz	400V/Three phase/50Hz

Sound pressure level
• The sound pressure measurement is conducted in an anechoic chamber.
• The actual sound level depends on the distance from the unit and the acoustic environment.

How to read a model name

1) M & S Series

M	M : M Series S : S Series
S	"S"= Wall-mounted , "F"= Compact floor-standing , "E"= Compact ceiling-concealed , "L"= 4- or 1-way cassette , "U"= Outdoor unit
Z	"Z"= Inverter heat pump , "H"= Fixed-speed heat pump , "blank"= Cooling only
–	
F	Series
H	Generation
25	Rated cooling capacity (kW base)
V	230V / Single phase / 50Hz
E	"A"= R410A with new A control , "B"= R410A with conventional control , "E"= R410A with new A control & ErP correspondance
HZ	"HZ"= Hyper Heating model , "H"= Anti-freeze heater equipped model , "S"= Silver indoor unit , "W"= White indoor unit , "B"= Black indoor unit

2) P Series

P	P Series
U	"K"= Wall-mounted , "S"= Floor-standing , "L"= 4-way cassette , "E"= Ceiling-concealed , "C"= Ceiling-suspended , "U"= Outdoor unit
H	"H"= For heating and cooling , "blank"= Cooling only
Z	"Z"= Inverter , "blank"= Fixed-speed
–	
ZRP/RP/P SHW	"ZRP"/"RP"= R410A & cleaning-free pipe reuse , "P"=R410A "SH"= Powerful heating ZUBADAN , "W"= can be used as air to water application
71	Rated cooling capacity (kW base)
V	"V"= 230V / Single phase / 50Hz , "Y"= 400V / Three phase / 50Hz
H	Generation
A	"A"= A control

3) MXZ Series

M	M Series
X	Multi-system outdoor unit (heat pump)
Z	Inverter heat pump
–	
4	Maximum number of connectable indoor units
D	Generation
72	Rated cooling capacity (kW base)
V	"V"= 230V / Single phase / 50Hz , "Y"= 400V / Three phase / 50Hz
A	"A"= R410A with new A control

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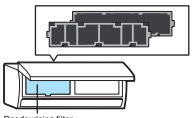
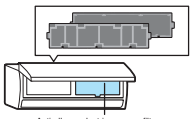
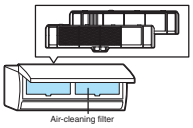
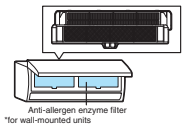
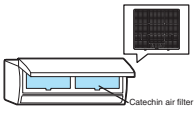
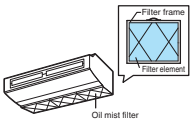
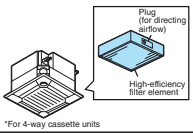
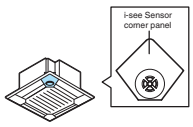
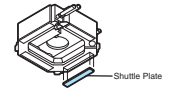
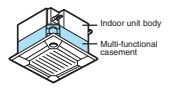
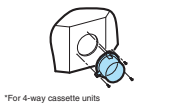
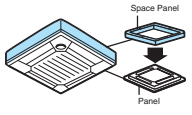
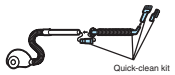
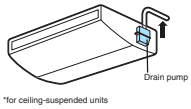
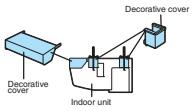
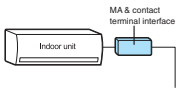
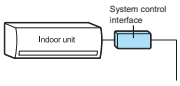
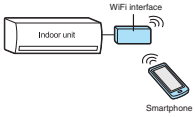
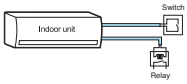
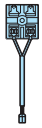
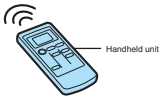
Major Optional Parts

Part Name	Description
Deodourising Filter Captures small foul-smelling substances in the air.	
Anti-allergy Electric Enzyme Filter This electrified filter catches dead mites and their droppings, pollen and other allergens on the filter filament, then decomposes them with artificial enzymes.	
Air-cleaning Filter Removes fine dust particles from the air by means of static electricity.	
Anti-allergen Enzyme Filter Captures the bacteria, pollen and other allergens in the air and neutralises them with the enzyme in the filter.	
Catechin Air Filter Contains catechin, which has antiviral and antibacterial characteristics.	
Oil Mist Filter Element Filter element (12 pieces) that blocks the oil mist for ceiling-suspended models used in professional kitchens.	
High-efficiency Filter Element Element for high-efficiency filter. Removes fine dust particles from the air.	
i-see Sensor Corner Panel Corner panel holding the i-see Sensor.	
Shuttle Plate Plate for blocking an air outlet of the 4-way cassette indoor unit.	
Multi-functional Casement Casement for fresh-air intake and attaching the high-efficiency filter element (optional).	
Fresh-air Intake Duct Flange Flange attachment for adding a duct to take in fresh air from outside.	
Space Panel Decorative cover for the installation when the ceiling height is low.	

Part Name	Description
Quick-clean Kit Cleaning tool to remove dust on the filter, fan and heat exchanger. This tool can be easily connected to a household vacuum cleaner for quick, convenient cleaning of the units.	
Drain Pump Pumps drain water to a point higher than that where the unit is installed.	
Decorative Cover To be attached to the upper section of ceiling-suspended models for professional kitchen use. Helps prevent dust accumulation.	
MA & Contact Terminal Interface Interface for connecting with the PAR-31MAA remote controller and PAC-YT52CRA, and to relay operation signals.	
System Control Interface Interface to connect with M-NET controllers.	
Wi-Fi Interface Interface enabling users to control air conditioners and check operating status via devices such as personal computers, tablets and smartphones.	
Connector Cable Interface which inputs the incoming On/Off signals to the air conditioner and outputs the On/Off signals from the air conditioner to the back-up heater.	
Power Supply Terminal Kit Terminal bed to change the power supply from outdoor power supply to separate indoor/outdoor power supplies.	
Wired Remote Controller Advanced deluxe remote controller with full-dot liquid-crystal display and backlight. Equipped with convenient functions like night-setback.	
Simple Wired Remote Controller Remote controller with liquid-crystal display, and backlight function for operation in dark location.	
Remote Controller Terminal Block Kit for PKA The terminal block is used as a relay to wire an indoor unit and to two remote controllers or to wire a remote controller and multiple indoor units in order to perform group control.	
Wireless Remote Controller Signal Sender Handheld unit for sending operation signals to the indoor unit.	

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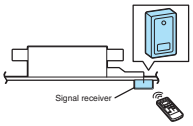
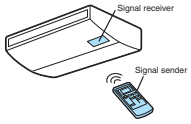
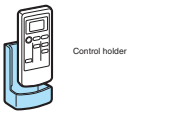
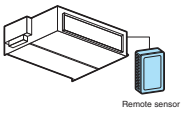
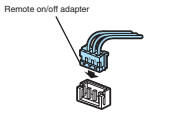
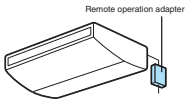
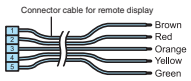
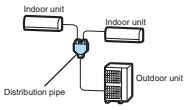
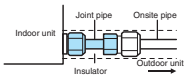
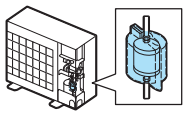
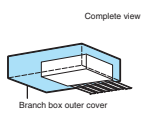
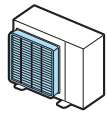
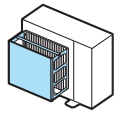
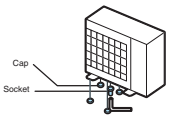
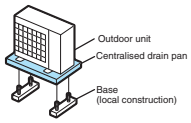
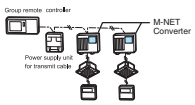
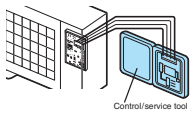
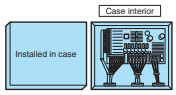
Part Name	Description
Wireless Remote Controller Signal Receiver Receives operation signals from the wireless remote controller handheld unit.	
Wireless Remote Controller Kit (Sender & Receiver) Remote controller handheld unit (signal sender) and receiver (signal receiver) for ceiling-suspended units.	
Control Holder Holder for storing the remote controller.	
Remote Sensor Sensor to detect the room temperature at remote positions.	
Remote On/Off Adapter Connector for receiving signals from the local system to control the on/off function.	
Remote Operation Adapter Adapter to display the operation status and control on/off function from a distance.	
Connector Cable for Remote Display Connector used to display the operation status and control on/off function from a distance.	
Distribution Pipe Branch pipe for P Series simultaneous multi-system use, or to connect two branch boxes for MXZ-8B140V(Y)A/160V(Y)A systems.	
Joint Pipe Part for connecting refrigerant pipes of different diametres.	
Liquid Refrigerant Dryer Removes water and minute particles from refrigerant pipes.	
Branch Box Outer Cover Casement for branch boxes.	
Air Discharge Guide Changes the direction of air being exhausted from the outdoor unit.	

Part Name	Description
Air Protection Guide Protects the outdoor unit from the wind.	
Drain Socket A set of caps to cover unnecessary holes at the bottom of the outdoor unit, and a socket to guide drain water to the local drain pipe.	
Centralised Drain Pan Catches drain water generated by the outdoor unit.	
M-NET Converter Used to connect P Series A-control models to M-NET controllers.	
Control/Service Tool Monitoring tool to display operation and self-diagnosis data.	
Step Interface Interface for adjusting the capacity of inverter-equipped outdoor units. (For further details, refer to pg. 130.)	

Wi-Fi Interface (MELCloud™)

MELCloud is a new Cloud based solution for controlling your Mitsubishi Electric Air Conditioning or Heating systems either locally or remotely by PC, Tablet or Smartphone via the Internet.

Remote control

MELCloud allows you to take control of your Mitsubishi Electric systems from anywhere in the world as long as you have internet access. So forgetting to turn off your air conditioning or heating system when away on holiday is no longer a problem.

Additional functions

MELCloud also provides some new functions, such as localised weather information, frost protection, 7 day multi programmable timer and holiday mode, with more features planned for the future.

User types

MELCloud has been designed for wide range of users from single users with single air conditioning or heating systems in a single building, up to larger user who may have multiple properties and multiple systems that they wish to monitor and control.

Whichever type of user you are, MELCloud can provide you with required control and access you need for modern living.

※Remote operation can be achieved as long as you have a connected system and you have an internet connection at the location of your equipment.

※Local operation is also possible if you close to where the system that you wish to control is, but simply to not wish to use the local controller and have your PC, Tablet or Smartphone to hand. Please note this is not direct connection via router, local cotnrol still requires internet connection to work.

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Optional Parts List <Indoor>

Indoor Unit			Filter																	Softdry cloth	i-see Sensor Corner Panel	Shutter Plate	Multi-functional Casement	Fresh-air Intake Duct Flange		Space Panel	Quick-clean Kit
			Anti-allergy Enzyme Filter		Electrostatic Anti-allergy Enzyme Filter			Deodourising Filter	Catechin Air filter	Oil Mist Filter Element	High-efficiency Filter Element				Filter Box													
			MAC-408 FT-E	MAC-171 FT-E	MAC-2310 FT	MAC-2320 FT	MAC-2330 FT	MAC-3000FT-E	MAC-3004 CF-E	PAC-SG38 KF-E	PAC-SH59 KF-E	PAC-SH88 KF-E	PAC-SH89 KF-E	PAC-SH90 KF-E	PAC-KE92 TB-E	PAC-KE93 TB-E	PAC-KE94 TB-E	PAC-KE95 TB-E	MAC-1001 CL-E	PAC-SA1 ME-E	PAC-SH51 SP-E	PAC-SH53 TM-E	PAC-SH65 0F-E	PAC-SF28 0F-E	PAC-SH48 AS-E	MAC-093 SS-E
M SERIES	Wall - mounted	MSZ-FH25VE					●	●																			
		MSZ-FH35VE					●	●																			
		MSZ-FH50VE					●	●																			
		MSZ-EF18VE2(W)(B)(S)				●													●								
		MSZ-EF22VE2(W)(B)(S)				●													●								
		MSZ-EF25VE2(W)(B)(S)				●													●								
		MSZ-EF35VE2(W)(B)(S)				●													●								
		MSZ-EF42VE2(W)(B)(S)				●													●								
		MSZ-EF50VE2(W)(B)(S)				●													●								
		MSZ-SF15VA																									
		MSZ-SF20VA																									
		MSZ-SF25VE				●																					
		MSZ-SF35VE				●																					
		MSZ-SF42VE				●																					
		MSZ-SF50VE				●																					
		MSZ-GF60VE			●																						
		MSZ-GF71VE			●																						
		MSZ-HJ25VA																									
		MSZ-HJ35VA																									
		MSZ-HJ50VA																									
	Floor - standing	MFZ-KJ25VE	●																								
		MFZ-KJ35VE	●																								
		MFZ-KJ50VE	●																								
	1-way cassette	MLZ-KA25VA		●					●																		
		MLZ-KA35VA		●					●																		
		MLZ-KA50VA		●					●																		
S SERIES	4-way cassette	SLZ-KA25VAQ2/VAL2																									
		SLZ-KA35VAQ/VAL																									
		SLZ-KA50VAQ/VAL																									
	Ceiling - conceald	SEZ-KD25VAQ/VAL																									
		SEZ-KD35VAQ/VAL																									
		SEZ-KD50VAQ/VAL																									
		SEZ-KD60VAQ/VAL																									
		SEZ-KD71VAQ/VAL																									
P SERIES	4-way Cassette	PLA-RP35BA									●										●	●	●	●		●	
		PLA-RP50BA									●										●	●	●	●		●	
		PLA-RP60BA									●										●	●	●	●		●	
		PLA-RP71BA									●										●	●	●	●		●	
		PLA-RP100BA									●										●	●	●	●		●	
		PLA-RP125BA									●										●	●	●	●		●	
		PLA-RP140BA2									●										●	●	●	●		●	
		PLA-ZRP35BA									●										●	●	●	●		●	
		PLA-ZRP50BA									●										●	●	●	●		●	
		PLA-ZRP60BA									●										●	●	●	●		●	
		PLA-ZRP71BA									●										●	●	●	●		●	
		PLA-ZRP100BA									●										●	●	●	●		●	
		PLA-ZRP125BA									●										●	●	●	●		●	
		PLA-ZRP140BA									●										●	●	●	●		●	
	Ceiling - conceald	PEAD-RP35JAQ													●												
		PEAD-RP35JALQ													●												
		PEAD-RP50JAQ													●												
		PEAD-RP50JALQ													●												
		PEAD-RP60JAQ														●											
		PEAD-RP60JALQ														●											
		PEAD-RP71JAQ														●											
		PEAD-RP71JALQ														●											
		PEAD-RP100JAQ															●										
		PEAD-RP100JALQ															●										
		PEAD-RP125JAQ															●										
		PEAD-RP125JALQ															●										
		PEAD-RP140JAQ																●									
		PEAD-RP140JALQ																●									
		PEA-RP200GAQ																									
		PEA-RP250GAQ																									
		PEA-RP400GAQ																									
		PEA-RP500GAQ																									
	Wall - mounted	PKA-RP35HAL																									
		PKA-RP50HAL																									
		PKA-RP60KAL																									
		PKA-RP71KAL																									
		PKA-RP100KAL																									
	Ceiling - suspended	PCA-RP35KAQ										●															
		PCA-RP50KAQ										●															
		PCA-RP60KAQ											●														
		PCA-RP71KAQ											●														
		PCA-RP100KAQ												●													
		PCA-RP125KAQ												●													
		PCA-RP140KAQ												●													
		PCA-RP71HAQ								●															●		
	Floor - standing	PSA-RP71KA																									
		PSA-RP100KA																									
		PSA-RP125KA																									
		PSA-RP140KA																									

*1 P Series indoor units can be used in combination with SUZ or MXZ outdoor units. *2 P Series indoor units can be used in combination with SUZ or MXZ outdoor units (MAC-333IF-E or MAC-397IF-E required).

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Drain Pump						Decorative Cover		System Control Interface	MA & Contact Terminal Interface	Wi-Fi Interface	Connector Cable		Power Supply Terminal Kit				Wired Remote Controller			Wireless Remote Controller					Remote Sensor	Remote On/Off Adapter	Remote Operation Adapter	Connector Cable for Remote Display
																	Controller		Terminal Block kit for PKA	Signal Sender	Signal Receiver		Controller Kit (Sender & Receiver)	Controller Holder				
PAC-SH94 DM-E	PAC-SH75 DM-E	PAC-SH83 DM-E	PAC-SH84 DM-E	PAC-SH85 DM-E	PAC-KE07 DM-E	PAC-SF81 KC-E	PAC-SF82 KC-E	MAC-333IF	MAC-397IF-E	MAC-557IF-E	MAC-1702RA-E	MAC-1710RA-E	PAC-SG94 HR-E	PAC-SG96 HR-E	PAC-SG97 HR-E	PAC-SH52 HR-E	PAR-31MAA	PAC-YT52CRA	PAC-SH29TC-E	PAR-SL97A-E	PAR-SA9C A-E	PAR-SA9F A-E	PAR-SL94 B-E	MAC-1200 RC	PAC-SE41 TS-E	PAC-SE55 RA-E	PAC-SF40 RM-E	PAC-SA88 HA-E
								●	●	●	●	●					●*3	●*3										
								●	●	●	●	●					●*3	●*3										
								●	●	●	●	●					●*3	●*3										
								●	●	●	

Optional Parts List <Outdoor>

Outdoor Unit \ Option			Distribution Pipe						Joint Pipe										Liquid Refrigerant Dryer		
			For Twin (50:50)		For Triple (33:33:33)	For Quadruple (25:25:25:25)	Flare Connection	Brazed	Unit ø6.35 --> Pipe ø9.52	Unit ø9.52 --> Pipe ø12.7	Unit ø12.7 --> Pipe ø15.88	Unit ø15.88 --> Pipe ø19.05	Unit ø9.52 --> Pipe ø15.88	Unit ø6.35 --> Pipe ø9.52	Unit ø9.52 --> Pipe ø12.7	Unit ø12.7 --> Pipe ø9.52	Unit ø12.7 --> Pipe ø15.88	Y-shaped pipe	For pipe ø6.35	For pipe ø9.52	For pipe ø12.7
			MSDD-50TR-E	MSDD-50WR-E	MSDT-111R-E	MSDF-1111R-E	MSDD-50AR-E	MSDD-50BR-E	PAC-SG72RJ-E	PAC-SG73RJ-E	PAC-SG74RJ-E	PAC-SG75RJ-E	PAC-SG76RJ-E	PAC-493PI	MAC-A454JP-E	MAC-A455JP-E	MAC-A456JP-E	PAC-AK52YP-E	PAC-SG81DR-E	PAC-SG82DR-E	PAC-SG85DR-E
M SERIES	F Series	MUZ-FH25VE																			
		MUZ-FH25VEHZ																			
		MUZ-FH35VE																			
		MUZ-FH35VEHZ																			
		MUZ-FH50VE																			
		MUZ-FH50VEHZ																			
	E Series	MUZ-EF25VE																			
		MUZ-EF25VEH																			
		MUZ-EF35VE																			
		MUZ-EF35VEH																			
		MUZ-EF42VE																			
		MUZ-EF50VE																			
	S Series	MUZ-SF25VE																			
		MUZ-SF25VEH																			
		MUZ-SF35VE																			
		MUZ-SF35VEH																			
		MUZ-SF42VE																			
		MUZ-SF42VEH																			
		MUZ-SF50VE																			
		MUZ-SF50VEH																			
	G Series	MUZ-GF60VE																			
		MUZ-GF71VE																			
	H Series	MUZ-HJ25VA																			
		MUZ-HJ35VA																			
		MUZ-HJ50VA																			
	Compact floor	MUFZ-KJ25VE																			
		MUFZ-KJ25VEHZ																			
		MUFZ-KJ35VE																			
		MUFZ-KJ35VEHZ																			
		MUFZ-KJ50VE																			
		MUFZ-KJ50VEHZ																			
S SERIES		SUZ-KA25VA4								●											
		SUZ-KA35VA4																			
		SUZ-KA50VA4								●											
		SUZ-KA60VA4																			
		SUZ-KA71VA4																			
POWERFUL HEATING		PUHZ-SHW80VHA	●																	●	
		PUHZ-SHW112VHA	●																	●	
		PUHZ-SHW112YHA	●																	●	
		PUHZ-SHW140YHA	●																	●	
P SERIES	Power Inverter	PUHZ-ZRP35VKA							●										●		
		PUHZ-ZRP50VKA							●										●		
		PUHZ-ZRP60VHA								●		●								●	
		PUHZ-ZRP71VHA	●							●		●								●	
		PUHZ-ZRP100VKA	●							●		●								●	
		PUHZ-ZRP100YKA	●							●		●								●	
		PUHZ-ZRP125VKA	●							●		●								●	
		PUHZ-ZRP125YKA	●							●		●								●	
		PUHZ-ZRP140VKA	●		●					●		●								●	
		PUHZ-ZRP140YKA	●		●					●		●								●	
		PUHZ-RP200YKA		●	●	●				●										●	
		PUHZ-RP250YKA		●	●	●					●										●
	Standard Inverter	PUHZ-P100VHA4	●																	●	
		PUHZ-P125VHA3	●																	●	
		PUHZ-P140VHA3	●		●															●	
		PUHZ-P200YHA3		●	●	●														●	
		PUHZ-P250YHA3		●	●	●															●
		PUHZ-P100YHA2	●																	●	
		PUHZ-P125YHA	●																	●	
		PUHZ-P140YHA	●		●															●	
MXZ SERIES		MXZ-2D33VA																			
		MXZ-2D42VA																			
		MXZ-2D53VA(H)													●						
		MXZ-3D54VA2													●						
		MXZ-3D68VA											●		●						
		MXZ-4D72VA											●		●	●	●				
		MXZ-4D83VA											●	●	●	●	●				
		MXZ-5D102VA											●	●	●	●	●				
		MXZ-6C122VA											●	●	●	●	●				
		MXZ-8B140VA					●	●					●	●	●	●	●	●		●	
		MXZ-8B140YA					●	●					●	●	●	●	●	●		●	
		MXZ-8B160VA					●	●					●	●	●	●	●	●		●	
		MXZ-8B160YA					●	●					●	●	●	●	●	●		●	

*1 Operation in “AUTO” step mode only: make sure to turn OFF “SW2-6” and put “TH5” (2 phose pipe thermistor) at the appropriate position.

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Branch Box Outer Cover	Air Discharge Guide								Air Protection Guide			Drain Socket			Freeze-prevention Heater (for Drain Pan)		Centralized Drain Pan			M-NET Converter		Control/ Service Tool	Step Interface
																							1 PC board w/attachment kit attachment kit
PAC-AK350CVR-E	MAC-889SG	MAC-856SG	MAC-886SG-E	MAC-883SG	MAC-857SG	PAC-SJ07SG-E	PAC-SG59SG-E	PAC-SH96SG-E	PAC-SJ06AG-E	PAC-SH63AG-E	PAC-SH95AG-E	PAC-SF37DS-E	PAC-SJ08DS-E	PAC-SG61DS-E	MAC-643BH-E	MAC-644BH-E	PAC-SG63DP-E	PAC-SG64DP-E	PAC-SH97DP-E	PAC-SJ19MA-E	PAC-SF83MA-E	PAC-SK52ST	PAC-IF012B-E
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